

CHAPTER 1

INTRODUCTION & IMPORTANCE OF AGRICULTURE

Agriculture exports consist of the following products

Rice, Wheat, Sugar, Cereals, Primary Commodities, etc.

The International Grains Council (IGC) has included India in the list of foodgrains exporting countries, moving it from the list of its importing countries.

India is the largest producer of milk, fruits, cashewnuts, coconuts and tea in the world; she is also among the top producers of rice, wheat, vegetables, sugar, fish and tobacco. India has moved rapidly from an importer of food grains to become an exporter.

Cashing in on an immense production base of fruits, vegetables and cereals, our processed food export is one of the fastest growing areas of the Indian economy. The traditionally high quality raw materials and an established techno-industrial base contribute to standardized, hygienically packed products. So it is hardly surprising that Indian processed foods are being recognized worldwide for their quality.

As on Aug 09, India accounts for 17% animal, 12% plants and 10% fish genetic resources of the globe and 16% of cattle, 57% of buffalo, 17% of goat and 5% of sheep population of the world.

As on Aug 09, agriculture contributes 24.2% of GDP, 15.2% of total exports.

Agriculture exports

Agro exports from India are a new exciting field for the budding exporter-entrepreneur.

Processed foods include fresh fruits and vegetables and their processed forms like fruit juices, pulp, canned and bottled fruits, walnuts, mushrooms,

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pappads, etc. There is a growing need for such products in the world market and various schemes are offered by APEDA for export of such products.

Floriculture is associated with fresh flower, cut flowers, dried flowers, live plants and dried plants. This again is covered in detail as a separate specialisation.

IMPORTANCE OF AGRICULTURE

India has the world's largest cattle population (193 million), large numbers of sheep and goats, and more water buffalo and camels than any other country. This has placed heavy demands on the grazing lands. Both grasslands and forest areas suffer as a result.

Growth in milk and egg production also increased dramatically. Dairy and poultry enterprises now provide substantially higher financial returns per hectare than crop farming. Such enterprises create new jobs and bring about health and nutritional improvements. Despite its great progress in improved irrigation techniques have the potential to increase food production; Improved-farming techniques in areas that rely on rainfall also could improve yield. Improving the use of fertilizer, especially on rainfed land, also would help production. India is trying a variety of strategies, from sophisticated water management techniques to traditional farming practices.

The new Foreign Trade policy for the period 2004-09 aims at giving a major thrust to acceleration of India's agri-exports through restructuring and revamping of various export promotion schemes. Wide ranging measures for simplification and streamlining of procedures were introduced with a view to making them more transparent and easy to administer.

CEREALS & GRAINS

India has moved rapidly from an importer of foodgrains to become an exporter. Today, it is the second largest rice producer after China, and is ranked tenth amongst the world's wheat growers.

Currently India is one of the largest producers of cereals and grains, with the long grained Basmati rice leading the rest. Basmati is the costliest rice in the world and had been a favourite of the great Indian Emperors.

IICPT

(www.pprc.gov.in)

Indian Institute of Crop Processing Technology, Thanjavur, T.N., is an R&D Institute under ministry of food processing industries (MFPI) and has the following activities:

Research and development in :-

Paddy, millets, pulses, oilseeds, Food Analysis & Agricultural Engineering.

Conducts training programs for farmers and students of agriculture in high tech food, food processing, etc..

Please get further details from their website.

CHAPTER 2

AGRO PRODUCTS IN INDIA

The agro products and food processing industry sector in India is one of the largest in terms of production, consumption, export and growth prospects. The government has accorded them a high priority, with a number of fiscal reliefs and incentives, to encourage commercialisation and value addition to agricultural produce, for minimizing pre/post harvest wastage, generating employment and export growth.

Important sub sectors in agro-products and Food Processing Industries are Fruit and Vegetable Processing, Fish Processing, Milk Processing, Meat and Poultry Processing, Packaged/Convenience Foods, Alcoholic beverages and Soft drinks and Grain Processing, etc.

Agro products and processed food exports constituted about 10 percent of total exports from the country and this is growing rapidly as India removes existing restrictions. Out of these exports, rice accounted for 29%, whereas marine products accounted for over 42%.

Primary food processing is a major industry with lakhs of rice-mills/hullers, flour mills, pulse mills and oilseed mills. There are several thousands of bakeries, traditional food units and fruit/veg/spice processing units in unorganised sector. The organised sector is also growing rapidly.

India is the world's second largest producer of fruits and vegetables, but hardly 2% of the produce are processed. India is the land of spices producing all varieties, which is processed for value-addition and export. It grows 22 million tons of oilseeds covering most of the varieties. Other important plantation products include tea, coffee, cocoa and cashew etc.

Agriculture and agro products remain the most important sector of the Indian economy. Progress in the agriculture sector is one of the most important achievements of India's development strategy. Indian agriculture is in the private sector, but the government has actively supported its development through the creation of infrastructure and a system of price incentives and subsidies. In terms of irrigated area and consumption of

fertilizers and pesticides, India ranks amongst the top few countries of the world.

Indian agriculture is beginning to appear globally competitive. Two important policy changes have made this possible. The first is the deliberate reduction in the high degree of protection earlier accorded to the manufacturing sector, which has improved the relative profitability of the agriculture sector. The second is, letting the farming community receive market prices so as to bring about more equitable terms of trade for this sector.

Cereals

- i. Basmati Rice,
- ii. Non Basmati Rice,
- iii. Wheat,
- iv. Other cereals

MARKETING OF AGRICULTURAL PRODUCTS

Marketing of the agricultural produces is done on the basis of overseas agents appointed for this purpose.

Bamboo

Next only to China, India has the richest bamboo genetic resources with 136 species. The global market is \$ 10 bln.

It is an eco friendly alternative to wood and leather. The bamboo toy when exported to Europe can fetch \$1 to \$150 each, a baseball bat upto \$80, in comparison to the wooden bat of \$30. A bamboo chair can fetch upto \$250 in the international market.

The most important criterion is that the bamboo should be pest free and should meet international standards of quality.

More than 40 professional designers from NIFT, NID, etc. are engaged in value addition exercise of several bamboo - based products.

Though Agriculture is the nodal Ministry, parts of the bamboo branding exercise fall under Ministries of S & T and Textiles.

Banana

Due to the tear and tensile strength of banana fibre extracted from pseudo stem, there is huge demand in foreign markets. This fibre is used in Yen note manufacturing by Japan.

This new business proposition has to be mechanised.

Dairy Products Exports

The Indian dairy sector's exports as on Feb 09 is Rs.1000 crore. The industry, in their efforts for diversification, is foraying into health products like bio-lassi and bio-dairy. During Aug-Oct 09, India has shipped about 3000 tons of casein (milk proteint) and the demand is increasing as world prices have gone up.

Chilli

STCL Ltd., a subsidiary of Spices Board, is setting up a fresh chilli Processing plant at Haveri, Karnataka, to produce chilli, rich in colour to international standards, free of aflatoxins.

Corn

We are located nearer to the markets in Middle East, Far East Asian countries such as Indonesia, Vietnam, S. Korea and Sri Lanka and Bangladesh. Also due to the increase in prices of animal and livestock feed, India is an attractive market for globe to import.

Gelatin

The market includes neutraceutical segment, mainly health supplements, vitamin capsules and tablets. In this product's export, India has a cost advantage. This finds applications in food, pharmaceuticals and photographic industries.

Out of 14000 TPA produced in India, 36 percent is exported: 80 percent of gelatin production is undertaken in high cost countries in EU, America and Japan. Globally the largest user of gelatin is food and food processing industry.

Litchi

The famous Muzaffarpur litchi samples are expected to lead to approval by US on safety related issues.

USDA-APHIS, USA, will conduct a three day cold treatment training in which Apeda, National Plant Protection Organisation and exporters will be participating, expecting the actual culmination of export order.

Mushrooms

The export market for India is chiefly the USA, with some quantities going to UAE, Russia, The Netherlands, Germany, UK, Switzerland, Denmark, Israel, and Sweden. The demand for button mushrooms is more than the speciality species. Due to demand for organic food growing, growth in Europe over the last ten years was around 20 percent and this is expected to continue. This growth is due to consumer, the supermarkets and these factors will also encourage the organic mushroom market in the future.

Soyabean

Soyabean has a very good potential both from the consumers point of view as well as to improve the sustainability of the soil.

Other Foods

- i. Ground Nuts,
- ii. Walnuts,
- iii. Jaggery and confectionery,
- iv. Cocoa products,
- v. Cereal preparations,
- vi. Alcoholic beverages,
- vii. Miscellaneous preparation,
- viii. Milled products.

CHAPTER 3

Major Product groups and Markets

RICE

India is bestowed with rich diversity of aromatic rices and among them the long grained super fine, aromatic basmati rices are the unique 'gift of nature' to our country.

The product is broadly classified into two varieties:

- * Basmati Rice
- * Non Basmati Rice
 - 1. White Rice
 - 2. Parboiled Rice
 - 3. 100% broken rice

Indian Rice needs no Govt. sops for export.

BASMATI RICE

Crop Pattern

India is the largest producer and exporter of Basmati rice in the world. The production hovers around 1.0-1.5 million metric tons of which exports are steady at 500,000 metric tons.

Sowing Period : Jun – Aug

Harvest Period and New Crop arrivals: Sep - Oct

In a bid to ensure quality of shipments and maintaining the distinctiveness of basmati as a product unique to India, the Commerce Ministry has formally issued standards for basmati rice to be mandatorily adhered to by exporters.

From now on, only the 11 varieties notified as 'basmati' under the Seeds Act 1966 can be exported under the basmati label from the country. Further, the official Export Inspection Agencies (EIA) will be able to legally impound any 'basmati' consignment containing rice other than the 11 notified varieties.

Trends & Developments

Due to a healthy domestic production and stiff competition from the traditional rival, Pakistan, Indian price is ruling at a low price, which forced the domestic market to take a plunge by almost 30 %. Present prices are at a 5 year low. Demand from the gulf market has increased due to price competitiveness and lesser quality claims due to assured quality.

Range:

Silky White / Sella / Pusa Basmati; Basmati Grade A; Basmati Grade B.

In May 06, Ministry of Commerce has notified 'Super' as a basmati variety under Export Inspection Council Act. Henceforth, rice exporters and farmers can label and market the variety as 'basmati' rice in the overseas market.

Basmati rice exports are allowed by APEDA under quota system. There is no restriction on all other exports.

Before sales Information

APEDA has made it mandatory to compulsorily certify the rice genetics for every variety of basmati rice to be exported and has appointed the Center for DNA Fingerprinting and Diagnostics, Hyderabad as the nodal agency for the purpose.

The trade body of EU wants all basmati rice being exported from India to be certified.

As on Mar 06, India's share in world market for basmati rice is 53%. Government has taken the following steps to increase export of basmati rice:

- ◆ Providing assistance to Indian exporters for undertaking publicity campaign

- ◆ Promoting trade delegations abroad
- ◆ Participation in international trade fairs
- ◆ Buyer-seller meets
- ◆ Providing financial assistance to exporters for improving quality, packaging and brand promotions.

For more details , contact nearest APEDA office.

India and China have signed a protocol for streamlining rice exports from India, making it easier for Basmati exporters from the country to gain access into the Chinese market.

Apeda is regularly conducting awareness workshops in growing regions for quality improvement of Basmati rice. Contact them for details.

MEAT

Global consumption stood at 260 mln tons in 04, with CAGR of 2.5% from 1998.

India now possesses processing technology for vacuum packaging of chilled meat; has obtained approval for meeting international design standards of abottairs/meat

Malaysia and Philippines are the most favoured export markets for us. Our exports in 04-05 were US \$ 386 million.

Poultry meat, beef and pork are the three most important meats in the world trade. In developed countries, the scope for increased demand is limited as population growth is slow and the consumption of livestock products is very high.

Indian meat exports to EU, US, S.Africa, Indonesia and Russia are at present restricted due to the foot and mouth diseases (FMD). However, our government has made efforts in creating FMD free zones in the country. Exports to restricted markets will rise.

Rise in meat exports has been mainly due to the establishment of state-of-the-art integrated meat processing plants which follow the guidelines of international animal health code. Our EOUs are HACCP, ISO-9001:2000 certified, and are equipped with SGS certification. The products carry

APEDA's 'Quality Produce of India' certificate.

Quality and more importantly traceability issues will need to be addressed carefully for continued supplies to the traditional markets and to gain access to upper end markets such as EU.

(ITC (HS) Classification of Export Import items)

Meat and edible meat offal

On the cartons for export of meat, the following details shall compulsorily be mentioned:-

- ◆ Name of the product
- ◆ Country of origin
- ◆ APEDA plant registration no.
- ◆ Name of the exporter

(Ref: notif. no. 58(RE-2005)/2004-09 dt. 31/3/2006)

If an abattoir / meat processing plant is not registered with APEDA meat exporter who has processed his meat in that plant cannot export, as Customs will disallow. This is the notification issued in Dec 04 by DGFT. This step is to avoid unscrupulous exporters getting into and spoiling the name of the country.

APEDA's stringent monitoring mechanism to prevent unauthorised export of meat and meat products

APEDA, in association with exporters, have worked out a strategy to strengthen the monitoring mechanism to stop the unauthorised export of meat and meat products. The following measures would be adopted to strengthen the monitoring mechanism:-

- ◆ A caution letter to all exporters having registered meat processing units with APEDA.
- ◆ A warning letter to the illegal and unauthorised processing units engaged in export of meat and meat products.
- ◆ Strengthening of surveillance mechanism for inspection and random visits to meat processing units and at custom points for on the spot assessment of the consignments.
- ◆ Only APEDA registered units are considered for benefits under

Vishesh Krishi Yojna and DEPB.

- ◆ State Animal Husbandry Departments not to issue certificate to the units which do not have the valid APEDA Registration Certificate.
- ◆ To seek the District Magistrate's intervention in checking unauthorised production and processing of meat for exports.
- ◆ Export of meat products to be allowed only on presentation of APEDA registration certificate of processing units.
- ◆ Development of manuals on good production practice (GPP), good monitoring practice (GMP) and good hygiene practice (GHP) in line with the guidelines of Codex and OIE.

Sugar

Due to withdrawal of subsidies, EU is vacating the 4 million ton market for sugar. India is on the way to follow the Brazil model of genomics program, to enhance export of white sugar.

Russian Federation's restrictions imposed in 08 on grounds of phyto-sanitary issues on our exports of plant/plant products were removed in Apr 09. Full details can be had from APEDA and National Plant Protection Organisation (NPPO), Ministry of Agriculture, Government of India.

CHAPTER 4

STRATEGIES FOR EXPORT MARKETS

PROCESSED FOODS

Food processing enhances shelf life and adds value even if the agri-produce is merely cleaned, sorted and packaged. Further processing into high value-added product is even more advantageous. It provides convenience and safe food to consumers and promotes diversification and commercialisation of agriculture by providing effective linkage between consumers and farmers.

Categories of food processing identified by the Ministry of Food Processing Industries:

- 1 Fruit & vegetable based products
- 2 Dairy
- 3 Edible oils
- 4 Meat & Poultry
- 5 Fisheries
- 6 Non-Alcoholic Beverages
- 7 Beer & Wine
- 8 Confectionary
- 9 Grain & Grain based products

Schemes run by the Ministry of Food Processing Industries:

- ♦ Scheme for Technology upgradation/establishment/modernisation of food processing industries
- ♦ Scheme for human resource development
- ♦ Scheme for quality assurance, codex standards and R&D
- ♦ Scheme for strengthening of nodal agencies
- ♦ Scheme for backward and forward integration and other promotional activities.

Most products being exported today are sold primarily to the non-resident Indian population or to Indians who have immigrated to the target markets. These markets are small, highly competitive and offer little area for growth. It is imperative, therefore, that the Indian snack food industry pursue opportunities for growth in the mainstream where consumption rates and product margins are higher than in traditional markets.

Furthermore, the demands of the export market will contribute highly to improving quality in India's domestic market due to increased competition. Based on current market statistics and trends, and the state of the Indian snack food industry currently, the following strategies are recommended in order to establish Indian manufacturers in the targeted export markets:

- * Expand Exporter Assistance
- * Research: adapt Indian snack flavors and types to target markets
- * Identify foreign manufacturer investment
- * Manufacturer relations
- * Market communications
- * Expand market amongst people of the Indian sub continent
- * Research cost/benefit of in-country affiliate manufacturing sites
- * Implement an export quality control system

International Trade

WTO involved countries in undertaking commitments to reduce domestic support to agriculture, cut export subsidies, eliminate non-tariff barriers to trade and rely in the future on tariffs to regulate imports.

Countries will need to strengthen both their domestic and export marketing capacity. Investment in export promotion will achieve relatively little unless the necessary handling and processing arrangements are in place to ensure that the products reaching world markets are competitive.

Research: adopt Indian snack flavors and types to target markets

The preliminary research indicated that the consumer acceptance is still way too low for Indian snack foods to be immediately viable in the target markets. The next stage of determining potential formulas will be to conduct similar tests to include more product types and isolate the best products, spice levels, shape, texture and ingredient blend to be successful.

There are two standards that companies follow when formulating for international taste profiles. Unfortunately, the two standards run in opposite directions. First, formulas need to be adjusted to conform to regional tastes. Second, companies try to avoid reformulating and look for a universal flavor with worldwide appeal. The result is that companies develop foods that fail internationally.

For the US market, an Indian snack food manufacturer may experience the greatest success with a broad range of products, with both traditional and mainstream offerings. This will provide consumers with more than one option and will help broaden the line's appeal. Indian flavors can be applied to potato or corn chips and can be sold alongside pappadums and one or more chick-pea based snacks.

Western-style products: The most likely opportunities that exist for Indian snack food manufacturers in the present term are for them to be a low cost supplier of Western-style snack foods, including potato chips, corn chips and other main-stream products. Many European and US manufacturers expressed interest in establishing trade relationships in this fashion, so that Indian companies are providing the excess production capacity to allow the branded firm to develop new product lines at lower cost.

Spicy mix: Spicy and flavored mixes are a popular concept in the US and Europe, but do not include the range of ingredients and flavors found in Indian products. Currently, sensory results indicated that the flavors are still too spicy for most western palates. However, these products are an excellent way to introduce Indian flavors to a wider audience. Mixes should be incorporated into restaurant and food service operations to introduce the flavors to mainstream consumers.

Namkeens: The broad category of namkeens takes a wide range of products into account. In the target markets, namkeens are only sold to mainstream consumers in the UK in a limited fashion. In the US, these products exist only in Indian shops and supermarkets. In order for the products to become viable in the mainstream markets, there needs a much greater emphasis on education, flavor, adjustment, packaging improvements and quality control.

Sweet meats: Sweet meats, such as halwa, are well represented in Indian markets in both the US and UK, but these products have not received much wide appeal from mainstream consumers. The intense sweetness is very different from western-style confections and many of the flavors used are unique almost exclusive to Indian sweets. Sweet meats are also sold, primarily, fresh, and this limits their ability to succeed in the export market, particularly given the high costs to ship in the temperature-controlled environment required for dairy-based products. For sweet meats to be successful they need to meet the tastes and trends found in the confectionery industries, as that is how these products will be distributed, purchased and consumed. Sweet meats do not appear to offer very high potential in the short and medium terms from an export standpoint.

Ready-to-fry snacks (RTF): Many of the Indian snacks, such as jeera chips, sago wafers, papads and products that require frying prior to consumption do have potential for use in contract manufacturing or even direct supply to restaurants and food service operations. Because long shelf lives are difficult to obtain in fried snacks, such RTF products offer numerous possibilities. Western consumers do not, typically, fry snacks prior to consumption. However, this may offer pre-production opportunities that would not be available if expensive packaging were required to ship already fried products overseas.

Identify foreign manufacturer investment

Since there is such a preponderance of Indian manufacturers producing snacks operate small businesses with low levels of capital investment; the ability of such manufacturers to obtain outside sources of funding is extremely difficult. Furthermore, most foreign manufacturers do not want to invest in companies that are not already successful or demonstrate the ability to be successful in the future. From the point of view of the outside investor, there needs to be a product, brand, process or market worth buying. This does not mean that opportunities do not exist. However, in order to attract investment, the process must first begin by helping to establish a level playing field whereby Indian manufacturers attract investment through successful business ventures. The following ventures may potentially attract foreign investment.

U K: The UK already has a well-established Indian food industry with numerous Indian flavors being sold in mainstream products. Because there is a high knowledge base of consumers of Indian products, an Indian newcomer to the market will face stiffer competition and a more sophisticated knowledgeable consumer.

However, there are numerous, time-honoured trade channels that Indian manufacturers can taken advantage of in order to get products into the market. Also, because there are many manufacturers currently making India-style products, a contract manufacturing relationship may be the most advantageous position from which to start.

USA: The U.S. snack market is dynamic and ripe for increased introduction of Indian snack products. Only a small handful of companies currently produce Indian snack products for the mainstream market, with most Indian snacks being sold to Indian immigrants and citizens who purchase traditional goods.

Once suitable products are identified, it is recommended that those Indian manufacturers prepared to enter the market do so as purveyors of their own line of upscale Indian snacks. As there are few mainstream manufacturers currently offering their own versions of Indian snacks, or Indian flavors on mainstream products, there is very little direct competition. However, that does not mean there aren't a multitude of snacks. There are! But with the continued expansion of ethnic and natural retail outlets, an upscale range of Indian snack products could be quite successful in entering the national market.

Through implementation of the strategy recommendations, market opportunities can be fostered concurrently which will identify foreign manufacturer investment. Currently, investment interest is low to non-existent.

India proposes equivalence with Taiwan and Japan for Organic products

India's NPOP recognition by the European Commission and government of Switzerland for equivalence to the standards for organic products and also recognition of our accreditation system and certification procedures by the US has resulted in the acceptance of Indian organic certified

products by the major markets of EU, US, and Switzerland. This development has resulted in bringing down the cost of certification, processing time for the exporters as well as recognition of Indian organic products in these markets. Incidentally, India is the only country in the world having these distinctions.

Japan being ranked as the third best market in the global scenario with food purchases amounting to US \$46 billion, the need was felt to have similar equivalence agreed with these countries. Fulfilling the requirement, APEDA, the secretariat for NPOP under Ministry of Commerce, formulated the proposal and submitted the technical dossier to Japan in June this year for seeking equivalence to standards of NPOP with JAS standards. Japan has shown a positive response for seeking equivalence with India. The work related to agreement with Japan is in process.

Similar, process is in progress with Taiwan and is expected to reach an agreement soon.

Manufacturer relations

As evidenced during discussions with manufacturers in the target markets, current knowledge and awareness of Indian snack foods on the part of European and US manufacturers is low or non-existent. In order to establish trade leads, contract manufacturing relationships or obtain foreign development support, there must be an extensive education and marketing program to bring the idea of Indian snacks to key decision makers. The following are some important activities that will increase chances of success in establishing relationships with manufacturers in the target markets.

Direct meetings

To educate US and European manufacturers about Indian snack products, face-to-face meetings should be arranged where Indian representatives can promote snack products, describe manufacturing capabilities and introduce “new” concepts to key decision makers.

In-country conferences

Interaction on the part of importers, manufacturers and suppliers of snack products has proven very instrumental in creating new opportunities and

addressing concerns of the industry. Annual meetings in target markets should be an integral component of any marketing program. To increase attendance, these meetings can be held in conjunction with major snack food shows such as the Snack Food Association's annual SNAXPO conference.

Market communications

One of the most crucial steps in developing a market for a new snack product involves communication with the target audience. The following marketing activities are proven methods for increasing market penetration and implementing a successful development program.

Publicity

It is necessary and beneficial to write and place feature articles about Indian foods in leading trade journals to try to convince manufacturers, restaurant owners, and food service operators to adopt similar products in their lines.

The third-party endorsement provided by trade publications is more effective and cost efficient than a massive advertising campaign. Editors need to fill magazines and newspapers with new information, and look to the industry to supply that material. Press releases and full feature articles generate many thousands of dollars of equivalent ad space at a mere fraction of the cost. Snack food, restaurant, food service, product development and food distribution publications should all be targeted.

Internet presence

As leading markets increase their penetration of Internet access, the World Wide Web becomes a useful tool for communicating information and serving as a link to the industry. An extranet can be used to communicate with potential buyers while an Intranet can be developed that allows only brokers and distributors access to relevant market and trade data. Given the need for rapid communications when trying to enter new export markets, the Internet can provide exceptional communications options in an extremely cost efficient manner.

Advertising

Advertising in the professional trade literature can be used to promote conferences, meetings, and product ideas. Some audiences can only

be reached through advertising, which should be targeted, specifically to those parties. Snack food industry journals, restaurant magazines and food distribution publications are potential vehicles for a targeted message.

Trade brochures

Trade brochures will be required to use in education, promotions and at trade shows and trade events. Full color, attractive information that provides historical, nutritional and technical information about Indian food products will be necessary.

International food fair and exhibitions, being held in India, brings together technology and innovation in food processing, packaging, ingredients, beverages, cooling, refrigeration, etc. This will be the platform for bringing together technology and innovation.

Exposure to accelerate investment opportunities with a view to boost exporters of Agri and Food products is facilitated with visitors from different parts of the World.

Expand market amongst people of the Indian sub-continent

In the US, most Indian foods are sold directly to immigrants from the Indian sub-continent, and to second and third generation Indians living in the States. This market, which still adheres to a great degree to traditional eating habits, appears to be the only consumers of Indian snacks.

In the UK, product development by British-owned Indian food manufacturing companies has turned traditional Indian snacks into a more mainstream product. Most Indian snacks incorporate Indian flavors, such as 'masala' and 'tandoori' with western-style products such as chips, crisps and extruded snacks. Although traditional Indian snacks are still sold directly to Indian consumers, these snacks are not nearly as popular with Anglo British consumers.

As the consumer sensory analysis indicated, the quality of products currently sold to Indians and Pakistanis in the target markets is of extremely poor quality. Expiry dates are entirely ignored and products are sold over one year past their pull dates. Oils are often rancid, foul smelling and have severe off flavors. Because of the poor quality, these products are

rarely purchased and the market does not currently offer much growth.

To help expand this market, export controls (see strategy 8) must be implemented to guarantee that the products exported with the intention of being sold to Indian/Pakistani consumers meet more stringent product quality guidelines. Such an export program would enlist the efforts of retail operators to try to adhere to these standards as well. The in-country cost of marketing is substantial and needs to be considered. The retail price is 4-5 times the export price of Indian snack.

Research cost / benefit of in-country affiliate manufacturing sites

In order to adequately address the opportunity costs of either manufacturing products in India and shipping them versus the establishment of manufacturing facilities in the target markets, APEDA should fund a feasibility study to examine the actual cost/benefit Indian versus in-market production. Preliminary research conducted beyond the initial scope of this project indicated that the costs to export product from India to the US and UK is roughly \$100-150/metric ton. There would be many benefits of establishing a production facility in the target markets.

Non traditional farm exports

The IMF reports that developing countries will enjoy static welfare gains of \$ 6 billion from rich countries opening up their markets to agricultural imports.

The change in pattern of competitiveness of India's agricultural exports means that we may have to look at non-traditional exports to take advantage of potential trade liberalisation.

Traditional plantation and agri crops like tea, coffee, wheat, rice, etc., are likely to give lower returns in exports.

The saviours for India might well be non-traditional exports, high in value addition, buoyant in demand. Vegetables and fruits (processed and unprocessed making up 6% of our agriculture exports) and meat and meat preparations (5%), oil meal, flowers and organic food, though still small in share have shown strong growth in recent years.

Non-traditional exports present a welcome diversification in our export

basket and reduce dependence on a smaller number of products and markets.

The focus on value-addition and agro-processing highlights the need to improve infrastructure (such as roads, storage warehouses and refrigerated transport) and processing facilities and set up a credible certification mechanism to guarantee quality of our agricultural exports and maintain health standards.

All imports into EU have the requirement to label GM feed and the requirement that all products derived from GM ingredients, should be labelled. This will affect 90 percent of GM products imports into EU, the world's largest single market.

Exporters are requested to check with APEDA on this new requirement for GM exports of farm trade.

Food ingredients export to EU

Developing country exporters have a market in EU for tropical and sub tropical products (exotics) which are hardly grown in Europe, and also for organically grown products.

A general trend in EU is that importers and manufacturers in EU do not ask for a food ingredient, but for a concept. This means that a product should include complete specs, suggestions for application, instructions on storage and process, proposals on product presentation, information on quality assurance (HACCP or ISO certification). An exporter having this concept can be more competitive for supplying food ingredients to EU for industrial use.

The exporter should adopt GAP (Good Agricultural Practice). The underlying theme of GAP is knowing, understanding, planning, measuring, recording and of managing to identified social, environmental and production goals.

For more details on GLOBALCAP, refer to
www.fao.org/prods/GAP/FAO-GAP.doc

Opportunities for exporters in developing countries lie in the following fields:

Organic oils and fats specialised vegetable oils and fats for niche markets (castor oil, Shea butter, sweet almond oil).

Main products : palm oil, cocoanut oil and palm kernel oil

PART II
HORTICULTURE EXPORTS
CHAPTER 1

Fruits and Vegetables

India as the largest producer of horticulture products has a very great export potential for the development of this sector. One of the key factors that determines the sustained growth of this sector, is maintenance of the quality of the product and increasing the shelf life till it reaches the consumer.

A robust domestic market for horticulture products has ensured growth and development of trade in horticultural produce. The market machinery has also developed very well within the country in this regard. However, lack of consumer appreciation for quality and the demands being seasonal in nature. the market machinery has not absorbed within itself the necessary technology for increasing the shelflife of the products.

The export potential of the horticulture products can have a sustained growth only if the quality of the product is preserved and its shelflife increased, so that the product remains fresh till it reaches the consumer. In order to remain price competitive, it is essential that such perishable products are exported in bulk by sea. This demands attention to the development of technology or increasing the shelflife because of the increased travel time by sea.

Operating in the Global Market

The global market for horticulture exports is becoming increasingly quality conscious. This has led to the development of certain norms and practices that are mandatory for operating successfully in the global market. The quality of horticultural products is measured on two broad sets of parameters, physical and chemical characteristics. Physical characteristics lead to specifications about size, weight, colour etc. of the produce, while chemical characteristics would typically lead to specifications about the fertilizer and pesticide residues in horticultural produce. Apart from this, specifications with regard to packaging, storage and transport have also become a part of the necessary requirements to function successfully in

the international horticultural market. These specifications, in turn, lead to certain processes and procedures that need to be incorporated in the pre-harvest and post-harvest activities when catering to the export market. These include setting up of pre-cooling facilities, cold storage facilities, undertaking tests for chemical residues, seeking certifications for good agricultural practices etc. Pre-harvest processes involve undertaking cultivation

As on May 08, India produces 11% of world's vegetables and 15% of world's fruits. The cost of vegetables in India are half the global average and that of fruits are two thirds of global prices. However, our share in world trade in fruits and vegetables has remained dismal at 1.7% and 0.5% respectively.

Government to boost horticulture exports

Horticulture contributed 52% of export share in agriculture from cultivated area of 10.0% with India being the largest producer of banana, mango and cabbage and enjoying highest productivity in grapes, sapota and banana.

However, problem areas are many. Large area under old/senile plantations, lack of irrigation and economy of scales, inadequate storage and cold chain, high wastages of the produce ranging from 8 to 37% and only 0.8% of produce is processed.

For reasons of poor export, low surplus was only available for export due to high domestic demand (current production levels of horticultural crops being below demand).

There was also poor quality of produce due to lack of awareness and infrastructure for post-harvest handling and inadequate marketing strategies in developed nations about Indian horticulture produce compounded by lack of awareness about global quality standards.

It is against this backdrop that the department of commerce is roping in the support of AEZs to lend weight to National Horticulture Mission by a focused strategy to plug the deficit in infrastructure facilities for exports.

PRODUCT CATEGORISATION

Fruits and Vegetables

- i. Fresh Onions
- ii. Other fresh Vegetables
- iii. Fresh Mangoes
- iv. Fresh Grapes
- v. Other fresh Fruits.

Mangoes

India accounts for nearly half of the global production. But the country is only the third largest exporter. Mangoes make up 15% of the total fresh fruits exports.

Mangoes are being exported mainly to Bangladesh, UK, Kuwait, Saudi Arabia, Singapore, Bahrain, Netherlands, US and UAE.

In 07, India has started exporting mangoes to US and Japan after a considerable gap.

The US mangoes market as on May 07 is about 25,0000 tons valued at \$156 mln/year.

The mango varieties that will now be imported by Japan would be Alphonso, Banganapalli, Kesar, Langra, Chausa and Malika which are grown in pre-identified areas of Andhra Pradesh, Gujarat, Maharashtra, Uttar Pradesh and West Bengal, according to the communication from Japan.

The potential markets for mangoes are US, Japan, Australia, New Zealand and China.

‘Mangonet’ - Mango exporters are requested to contact the nearest APEDA office for assistance.

In Aug 08 Australia announced approval of import of Indian mangoes after satisfactory quality tests. India has to get prepared for 09 export season.

As per Japanese buyer's requirement, mangoes are vapour heat treated, tested and certified before export to Japan.

For export to US, Apeda is arranging to set up irradiation facilities in AP.

Please log on to APEDA's website which gives six page guidelines for export of mangoes to Japan and for more details.

In 07, India exported 160 tons to US and 26 tons to Japan.

The irradiation facilities set up by Bhabha Atomic Research Centre, Mumbai are awaiting approval by USDA.

Exporters are to get in touch with APEDA for procedures of export to US.

FENI

FENI, the Goa state drink brewed from ripe cashew, apples and coconut has GI (Geographical Indication). Goan Feni has now entered the white spirit segment, especially in USA and EU.

Pineapples

As on Oct 09, Vazhakulam (Kerala) pineapples have got GI status, and this will enable the exporters to brand the product to increase its acceptability.

Processed Fruits and Vegetables

- i. Dried and pressed vegetables
- ii. Mango Pulp
- iii. Pickles and Chutney
- iv. Other processed Fruits and Vegetables

All over the world the focus has shifted from foodgrains to vegetables. Governments, the scientific community and global organisations such as the FAO are looking at vegetables not only as a valuable source of nutrition but also as a means of raising the income levels of farmers. Value-added vegetables can become an important commodity in global trade and earn the country millions of dollars in foreign exchange. A beginning has already

been made in India by the government identifying about 40 agri-export zones all over the country through which horticultural produce such as mangoes, gherkins, rose, onions, lichees and so on can be exported.

Says FAO's representative for India and Bhutan: "In the new WTO regime there is a greater scope for vegetable exports but food safety norms such as pesticide residue must be strictly adhered to." For this, there should be greater interaction with farmers at the production level. The global production and consumption of vegetables varies from region to region.

We should get the supply chain management right from the farmer to the packaging stage with quality management.

Efficient cold chain transport can be started on a small scale as it is labour intensive. Projects can be started on a small scale - like fresh produce packaging unit which needs hygienic packaging machine in a room with a complete cold chain. The investor can be a village co-operative or a small entrepreneur. There is not so much technology as much as logistics and supply chain.

Global exports of fresh and processed vegetables rose from 19.7 m tonne in '90 to 32 m tonne in '00 accounting for 4.6% of total vegetable production valued at \$22 bln. As per FAOSTAT, tomato and tomato products accounted for \$4.6 bln. Opportunities for exports also exist in chillies, mushroom, asparagus, peppers and green beans, which give good returns. Similarly, processed food also gives high returns.

To promote exports, for export of following perishables from NE states through Kolkata, Delhi or Mumbai airports, government on Aug 06, has announced reduction in freight of inland transports.

The products are banana, guava, lemon, orange, pears, pineapples, plums, cut flowers, ginger, passion fruit, kiwi, apple, bamboo and cane for food purposes.

For details, please contact nearest APEDA office.

An US team has inspected vapour heat treatment facilities (irradiation) of Apeda in Maharashtra for export of mangoes, to be fruitfly free.

CHAPTER 2

Major Product Groups and Markets

Among fresh fruits, India's strength lies in grapes, pomegranates and mangoes.

Increased availability of surpluses, changing life styles, tastes and higher disposable incomes are pushing the growth of Indian food processing sector.

Processed Fruits and Vegetables:

Export markets

Dried & Preserved Vegetables	Sri Lanka, USA, UAE, Germany, France, Netherlands
Mango Pulp	USA, Saudi Arab, Kuwait, Netherlands, UK, UAE.
Pickle & Chutney	UK, USA, UAE, Germany, Canada, Netherlands, Saudi
Other Processed Fruits & Vegetables	USA, Netherlands, UK, UAE, Indonesia, Philippines

Gherkins

Gherkins (Calypto variety) are a hybrid of cucumber and have good export potential to countries such as France, Canada, US, Central and Eastern European countries.

Following Karnataka, AP is brisk in setting up AEZ (Agri Export Zone) exclusively for Gherkins. The future of this fruit's export is immense.

Major Horticulture Markets from Indian Perspective

Commodity	Country	Total Imports (US \$ mln)	CAGR (98-03) (%)	India's Position		
				Share (%)	Rank	Leading Exporters
Fruits & Nuts	USA	228	12	4	7	Chile, Mexico Costa Rica

	Netherlands	64	-6	2	11	Spain, Belgium, S Africa
	UK	40	0.4	1	15	Spain, S Africa, France
Vegetables	USA	28	17	0.9	10	Mexico, Canada, Netherlands
	Malaysia	27	11	11	4	China, Australia, Thailand
	UK	10	7	0.5	23	Spain, Netherlands, France

Fruit juice and concentrates

Fruit juices, Concentrates and pulp/puree continue to be traded internationally, mainly in bulk form, and used as raw material by various industries.

There is a demand for processing fruits into concentrates and Holland is a major buyer of pomogranate concentrate.

The beverage industry is by far the biggest end-user of these products. It produces juices, nectars, fruit juice drinks, multi-fruit and multi-vitamin beverages, alcoholic liquors, syrups, etc. Mango pulp is now stated to be a vital ingredient in the increasingly numerous multi-blend and value-added drinks. Ten to fifteen varieties of mango in varying qualities and flavour, are now offered in world trade. Major consuming countries now enjoy an increasing range of products using banana pulp also. It is relatively low-priced compared to other fruit flavours. Banana pulp/puree are used as flavour enhancers in the expanding range of multi-blend and banana-based fruit drinks.

India is the “world’s key supplier” of mango puree and concentrate, with its TOTAPURI variety a favourite blend in juices, while the premium - priced ALPHONSO is often used as a pure fruit juice or a flavouring for ice-cream. Indian processors look mainly to Europe and the Middle East for sales. However, it is the industry’s view that domestic consumption is also increasing.

WEST ASIA accounts for bulk of our Mango Pulp exports around 60%; while exports to Western Europe Constitute 20-22%. India also annually supplies around 5,000 tons GUAVA PULP, about 6,000 tons BANANA

PULP & approx. 1,000 tons PAPAYA PULP to world markets.

Mango Concentrate

With the entry of new processors in the market, the traders in Europe are expecting lower prices. Offers were expected to be USD 1100/tonne C&F Europe for 28 brix totapuri mango concentrate for new season supplies, against as much as USD 1600/tonne 2002 season, when poor weather and the low-output year in the mango-bearing cycle curtailed India's production significantly. Both demand and supplies are expected to be important.

APEDA provides financial support to set up state-of-the-art fully integrated pack houses with modern containerised VHT (Vapour heat treatment) systems for promotion of mango exports.

APEDA has established a vapour heat treatment plant at Vashi, Navi Mumbai, and is setting up three more at Tirupati, Nuzvid and Saharanpur

The industry in India is largely seasonal in nature. Production operations for various fruit products, largely pulp and Concentrates, depend on the seasonal availability of the different fruits. The seasonal pattern is indicated below:

- * Alphonso Mango : Apr to May.
- * Totapuri Mango : May to Jul.
- * Guava : Sep to Jan
- * Banana : Oct to Apr.
- * Papaya : Sep to Jan

Trends are increasing in consumption of fruit drinks in UK and EU. UK's 2003 market for fruit drinks is £ 2000 mln. India produces 40 percent of tropical fruits, against Asia's production of 90 percent. There is a progressive tendency in USA to use aspartame instead of sugar.

There is a new market for fruit juices to be blended with aspartame, to take care of diabetics. The latest world trend is that fruit is a dietary

supplement. In fruit concentrates, the latest technique adopted by Brazil should be followed by us, i.e., bulk sea transportation in tankers and unloading into offshore storage tanks strategically located in Western

European ports, South East Asian ports, Far East Asian ports, etc. This will make our exports of concentrates extremely competitive and the infrastructure investments will give returns quickly, as the reduction in transportation costs is 50 percent!

The major international market requirements are :

Pine Apple juice concentrate

Orange juice concentrate

Frozen foods in processed form

Frozen Vegetables

Canned foods

Tomatoes are emerging as a major market item of late. To capture this market, we must get into contract farming with all the requirements of nutraceutical values.

Future Trends

The existing types of product includes juice drinks, sports drinks, energy drinks, carbonated drinks and flavoured water. Health drinks growing market segment. More and more consumers looking into energy inducing Drinks. Changing consumer demands being fast and busy need something that is healthy and can replace Breakfast. Fortified juice, orange juice based drink, fortified with Vitamins and Minerals, since introduced in 2001 account for 30% of overall chilled orange juice sales. Sports drinks - Ingredients to be added in Drinks. By adding Inulin and Oligosaccharides to drinks especially Dairy based ones, to increase the mouth feel, taste, and texture.

Potential Market Sector

Convenience Stores

Service Stations

Fast Food Outlets

Vending Machines
Sporting and Leisure Centres
Retail Outlets

To cater to this sector, we need to look into the distribution network.
Wholesalers / Agents / Key account Customers / Logistics / Transport
and Storage.

Fruit juices and Drinks

Fruit juice : Pure juice with no additives

Fruit Drinks : Soft Drinks with various amts of Fruit juice and
additives

Pulp and Concentrates are in their purest form, with no additives or
preservatives at any stage.

Directives and Regulations

Germany, has RSK systems indicating Chemical and Physical
parameters with maximum and minimum limits. For eg, any bottled
liquid, within these parameters is classified under fruit juice.

British and French Regulations require a fruit juice to have 100% fruit to
be classified as a fruit juice.

New Directive in process to be issued to bring all EU under the same
standards.

Strategy for Greater Market Share

Improving Quality Parameters

Raising the Current perception of Indian products

Innovative marketing and distribution

Quality Parameters

Process control

Quality Management systems

Risk Assessment (HACCP Systems)

Traceability and Documentation

Internal Audits

Hygiene and House keeping

Only 10% of India's fruits and vegetable produce of 134.5 million ton has been made available to cold storage facilities. The cumulative wastage across the present Indian supply chain varies from 24% to 40%.

India's share in the global processed food market is around 1.5%. The aim is to increase that share to 6%. Further, we would want at least 20% of India's overall fresh produce to be processed.

There are 12 centres for handling agri-perishable exports, 30 mega food parks for fresh fruits & vegetables processing and the already existing 58 agri-export zones.

Cold chains, cold storage, logistics and food processing units are vital to make India an export hub for fresh fruits and vegetables. Export earnings are more in the processed food segment.

Accreditation

Recognition from accredited bodies such as IRMA, BRC, EFSIS, ISO 9000 SGF

Consistency in Product, Quality and Service

Maintaining Customer relations through Effective Communications

Innovative Marketing

Market research to be carried out to fix the price.

Western habits different from east. No heavy breakfast. Drinks lots than eating.

Packaging using recyclable and biodegradable materials, light weighing materials and cost effective.

Labelling

Creating Brand Awareness through Advertising and Media

Point of sale - Entry into the right time

Conclusion

Due to the emerging scenario where many exporters are looking for guidance and advice to enter the European Market, various consultancy firms have emerged to offer their expertise.

Export of processed Mango Products

The raw fruits of Mango are used for processing of value added products like Pickles, chutney, Ripe fruits are used for preparation of Juice, squash, jelly, and jams. These value added products are in good demand in the international market. These processed products are exported to U.K., USA, Australia, Saudi Arabia, UAE, Bangladesh, Canada, Denmark, Germany, Hungary, Malaysia, etc.

‘Cost competitiveness’ is a significant factor in rendering the exports of processed fruits a viable option. Transportation is one key sector where considerable saving could be achieved without making compromises on the issue of quality and safety.

Import demand for fresh tropical fruits is expected to continue to expand as a result of rising incomes in developed countries and heightened consumer interest in, and knowledge of, these fruits. For the four major fruits traded internationally, pineapples, mangoes, avocados and papayas, import demand would expand at average annual rates of 3.0 - 4.5 percent in the period to 2005, compounded over ten years by an average of 40 percent. Europe would remain the largest market, accounting for nearly 50 percent of global imports, followed by North America (nearly 30 percent) and Japan (10 percent). Gross export worldwide has increased 7.7% / year in the years 1984 - 1994 and is expected to grow with 3.3% / year in the time span 1994 - 2005.

Pineapples, mangoes, avocados and papayas represent on average approximately 75 percent of total fresh tropical fruit production and approximately 90 percent of exports in fresh form. Demand growth has been robust.

The distribution system in the United States, like that in the EC, is highly integrated. Generally, the same marketing channels for bananas are used for the distribution of tropical fruits. The trend in the last five years has been towards direct sales from grower/exporter to large retail chains, cutting out the intermediaries.

Therefore, successful marketing is becoming increasingly dependent on building strategic alliances with major distribution firms.

To promote a dynamic future for tropical fruits, production has to be better organised, not only for the improvement of quality, but also to ensure competitiveness and efficiency of fruit production. On the demand side, other than economic factors. The improvement of packaging, transportation, and market promotion are specific requirements for the expansion of markets for tropical fruits. In addition, exporters need to create strategic alliances to ensure the acceptance, wide diffusion and efficient distribution of their products.

Asia is by far the largest producing region. It accounted for 69 percent of global tropical fruit output, but its share of the world's fresh tropical fruit exports was much lower at about 26 percent.

Although India is one of the world's largest fruit producers, current export volumes represent less than one percent of domestic production levels, and an insignificant amount of total world fruit trade. Despite the low levels of exports, more than 80 percent of total fresh fruit exports from India are tropical fruits.

Strategic Issues

Industrial countries rely upon trade in agricultural products to provide the quantity, quality and variety of goods demanded by modern consumers.

There continues to be important limitations to the free global movement of tropical fruit, despite the opportunities resulting from globalization, and many countries have experienced difficulty adjusting to a new trade environment characterized by reduced tariff barriers. Countries may thus turn to other measures (such as SPS) in order to protect domestic markets. It is important to recognize that SPS measures should be applied to the extent necessary to protect human, animal and plant life or health.

Both the SPS and TBT Agreements acknowledge the importance of harmonising standards internationally if the risk of sanitary, phytosanitary and other technical standards becoming barriers to trade were to be minimised or eliminated.

The incidence of disease from contaminated food has reached serious proportions worldwide and food safety quality has become of paramount concern to the international community.

Fresh fruit standard adopted by the Codex Alimentarius Commission to date include avocado, banana, carambola, lichee, mango, mangosteen, papaya and pineapple. The codex has also evolved recommended standards for various processed tropical fruits through its Codex Committee on Processed Fruits and vegetables. As a further assistance to ensure quality processing of tropical fruits, the Codex has adopted international codes of hygienic and/or technological practices. It is considered that the codes apply to any fruits, including tropical fruits if these are being processed by canning, drying, dehydrating or quick freezing. The general Principles of Food Hygiene are, however, considered applicable to all foods, including tropical fruits and vegetables.

Packaging

Packaging plays a vital part in export of fresh fruits, vegetables, fruit juices and concentrates.

The developed nations offer a huge market for these products with the requirement of ultimate in quality due to human consumption.

In fact, the international packaging standards for food products are advancing day by day. One of the latest is 'Tetrapack'.

India is catching up with the latest manufacturing techniques of packaged products and we have many manufacturing units meeting the strict international standards.

Interested persons are requested to contact nearest

a) APEDA Office

b) IIP (Indian Institute of Packaging), Mumbai/Chennai

Grapes

With a view to further strengthen Indian grapes position in the international market APEDA issued in 2003 a notice for the Regulation of Export of fresh Grapes from India through monitoring of pesticide tissues. The document has been aligned with the requirements of Eurogap, British Retailers Consortium (BRC) and Branch Hygiene Code (BHC) and documented in such a way that Indian grapes do not test in excess of the prescribed MRLs of the pesticide residues at the ports of import in the European market. Our export will be allowed after APEDA's certification and a Phyto Sanitary Certificate will be issued.

Recently a policy decision has been taken to promote recognition of packaging for export of grapes as per the guidelines of EU.

APEDA's detailed reports on 2009 grape shipments can be had from their website hosted under 'Announcement Section', on subscription basis.

The Competitive edge we enjoy in exports is in terms of raw materials and labour. But we must adopt modern food quality management systems such as TQM, ISO -9000, ISO - 14000, HACCP, GMP and Good Hygiene practices.

Food Processing Ministry, as on Jan 06, is implementing a scheme by which eligible agencies can receive grant-in-aid for quality enhancements.

For details contact APEDA.

EU market for fruit juices and concentrates

The fruit juices and concentrates are classified under the following HS code

HS Code 2009	Fruit juices (incl. Grap must) and vegetable juices, unfermented and not containing added spirit
2009 11	Frozen orange juice
2009 12 / 19	Unfrozen orange juice
2009 21 / 29	Grapefruit juice
2009 31 / 39	Juice of any other single citrus fruit
2009 41 / 49	Pineapple juice
2009 50	Tomato juice
2009 61 / 69	Grape juice(including grape must)
2009 71 / 79	Apple juice
2009 80	Juice of any other single fruit or vegetable
2009 90	Mixtures of juices

Export market for fruits and nuts

India's fruits and nuts exports

- Out of US \$849 million, tree nuts 72.7%, fruits and nuts 27.3%
- Mango pulp exports in 05-06 is US \$82 million
- Exports of fresh mangoes in 05-06 US \$29 million
- Fresh grapes exports in 05-06 US \$48.3 million, with Netherlands and UK being top destinations.
- Fruits to be developed for export as fruit juices are Banana, Guava, Lychee, Papaya and Pineapple.
- Tree Nuts
- Cashew nut exports is 94% of treenut exports, at US\$ 583 million. USA's share is 38% and next is Netherlands.

- The two constraints for developing horticultural export are inadequate infrastructure and sanitary and phyto-sanitary measures acting as trade barriers. India needs cost effective cold chain infrastructure, lacks systems and focus in pesticide management.
- USA and EU impose zero duty on fruit pulp and concentrates from Latin America where our exports are charged duty under GSP regime.
- China and Eastern Europe provide significant opportunities for Indian processed food exports.

Wines

Nashik Valley Wine Producers' Association (NVWPA), along with co-applicant, National Horticulture Board (NHB) have applied in Feb 09 for GI recognition for their produce, 'Nashik Valley Wines'.

CHAPTER 3

FOOD PROCESSING INDUSTRY

The Ministry of Food Processing has been instrumental in ensuring passing Food Safety and Standards Bill 2006 and Food Safety and Standards Authority of India (FSSAI) in 2008. The creation of FSSAI working under the Ministry of Health and Family Welfare is aimed at creating a regime which would ensure adherence to global standards of safety for the industry.

MFPI (Ministry of Food Processing Industry) was set up in 1988. (www.mofpi.nic).

Tin). It recognised itself to act as a catalyst for increasing exports.

As on Mar 10, 150% FDI (Foreign Direct Investment) is allowed under automatic route in food processing industry and food infrastructure including food parks, distillation and brewing of alcohol, cold storage chain and warehousing.

As on Dec 09, the Indian agro-products and food processing sector including valued added products such as semi processed and ready-to-eat packaged foods has an approximate annual turnover of US \$40 billion. In India the food processing sector attracts 6% of the total industrial investment in the country and accounts for 13% of exports.

India wastes more fruits and vegetables than it consumes. About 30% of the fruits and vegetables grown in India (40 million tons amounting to US \$ 13 billion) get wasted annually due to gaps in the cold chain such as poor infrastructure, insufficient cold storage capacity, unavailability of cold storages in close proximity to farms, poor transportation infrastructure, etc.

Food processing industry is one of the thrust areas identified for exports . Free trade zones (FTZ) and export processing zone (EPZ) have been set up, with all infrastructure. Also, setting up of 100% Export Oriented Units (EOU) is encouraged in other areas. They may import free of duty all types of goods including capital goods.

Government has already announced a special incentive for the food processing sector by extending the deductions permissible under section 801(A) to all food processing units based on all perishable items like milk, poultry, meat, etc (earlier this was applicable to only fruits and vegetables).

As on July 09, large number of French companies are investing in the food processing sector of India and the Indian companies must take advantage of the affordable technologies developed by France.

Processing of agricultural commodities offers great scope for making available a commodity into a better useable form with value addition and resulting higher income transfer to farmers. Among the agro-processing industries, food processing industry is the dominant one. Processed food products can be classified into major groups such as cereal products, fruit and vegetable products, dairy products, meat products and marine products. As the fruit & vegetables are highly perishable in nature, processing assumes paramount importance for exploiting the economic potential by creating time, form and space utilities. The demand for processed fruit & vegetable products is bound to increase with the increase in real income and improvement in the standard of living, modern life style, urbanisation, contribution of women in household income, etc.

As on Oct 09, India accounts for first below 2% of global processed food trade.

Food processing is the country's fifth biggest industry supported by a great agri-climatic diversity suitable for round the year cultivation of crops. Agriculture contributes 24.2% to GDP, 15.2% of total exports and provides employment to 58.4% of country's work force. Key statistics of India's agri-diversity:

In terms of production, India is among the world's major food producers - India accounts for 17% animal, 12% plants and 10% fish genetic resources of the globe; and 16% of cattle, 57% of buffalo, 17% of goats and 5% of sheep population of the world.

India's exports of processed fruits and vegetables have increased considerably over the last few years, from \$144 million in fiscal 04 to

\$278 million in fiscal 07. Exports of processed vegetables have increased.

‘Cost competitiveness’ is a significant factor in rendering the exports of processed fruits a viable option. Transportation is one key sector where considerable saving could be achieved without making compromises on the issue of quality and safety.

Import demand for fresh tropical fruits is expected to continue to expand as a result of rising income in developed countries and heightened consumer interest in, and knowledge of, these fruits.

Pineapples, mangos, avocados and papayas represent on average approximately 75 percent of total fresh tropical fruit production and approximately 90 percent of exports in fresh form. Demand growth has been robust.

The distribution system in the United States, like that in the EC, is highly integrated. Generally, the same marketing channels for bananas are used for the distribution of tropical fruits. The trend in the last 5 years has been towards direct sales from grower / exporter to large retail chains, cutting out the intermediaries.

Therefore, successful marketing is becoming increasingly dependent on building strategic alliances with major distribution firms.

To promote a dynamic future for tropical fruits, production has to be better organised, not only for the improvement of quality, but also to ensure competitiveness and efficiency of fruit production. On the demand side, other than economic factors. The improvement of packaging, transportation, and market promotion are specific requirements for the expansion of markets for tropical fruits. In addition, exporters need to create strategic alliances to ensure the acceptance, wide diffusion and efficient distribution of their products.

Asia is by far the largest producing region. It accounted for 69 percent of global tropical fruit output, but its share of the world’s fresh tropical fruit exports was much lower at about 26 percent.

Although India is one of the world’s largest fruit producers, current export

volumes represent less than one percent of domestic production levels, and an insignificant amount of total world fruit trade. Despite the low levels of exports, more than 80 percent of total fresh fruit exports from India are tropical fruits.

Strategic Issues

Industrial countries rely upon trade in agricultural products to provide the quantity, quality and variety of goods demanded by modern consumers. There continues to be important limitations to the free global movement of tropical fruit, despite the opportunities resulting from globalization, and many countries have experienced difficulty adjusting to a new trade environment characterized by reduced tariff barriers. Countries may thus turn to other measures (such as SPS) in order to protect domestic markets. It is important to recognize that SPS measures should be applied to the extent necessary to protect human, animal and plant life or health.

Both the SPS and TBT Agreements acknowledge the importance of harmonising standards internationally if the risk of sanitary, phytosanitary and other technical standards becoming barriers to trade were to be minimised or eliminated.

Quality Check of fruits exports

APEDA has successfully introduced 'Grapenet' that integrates supply chain of fresh grapes exported from India to EU. It has helped 40,000 grape farmers to band together and adopt uniform farming practices.

Implementation of the residue monitoring system and IT-based traceability procedure has enabled importers and supermarkets in EU to repose confidence in Indian grapes.

The incidence of disease from contaminated food has reached serious proportions worldwide and food safety quality has become of paramount concern to the international community.

Fresh fruit standards adopted by the Codex Alimentarius Commission to date include avocado, banana, carambola, lychee, mango, mangosteen, papaya and pineapple. The Codex has also evolved recommended

standards for various processed tropical fruits through its Codex Committee on Processed Fruits and Vegetables. As a further assistance to ensure quality processing of tropical fruits, the Codex has adopted international codes of hygienic and/or technological practices. It is considered that the codes apply to any fruits, including tropical fruits if these are being processed by canning, drying, dehydrating or quick freezing. The General Principles of Food Hygiene are, however, considered applicable to all foods, including tropical fruits and vegetables. For clarifications, please contact nearest APEDA Office.

1st November, 2008, APEDA launched on its website the new versions of its scheme for Recognition of Horticulture Pack Houses. The scheme focuses on better hygienic and infrastructure operations in the pack houses as also on quality management and record keeping by the units.

In the new scheme, a modified system of orchard registration through state Horticulture Department will allocate a unique Code number in order to accord state identity and avert duplication of number. Inspections will commence soon, against application.

Residue monitoring plan for Pomegranate launched

Pomegranate being a major fruit crop is in huge demand in the international market, especially in the European Union. Pomegranate exports are expected to rise during the current season. To help exporters monitor the residue scenario in a more organized manner and to boost exports of quality fruit APEDA in Dec 08, has launched a Residue Monitoring Plan (RMP) for pomegranates. This has already been hosted on the APEDA website for the general information of exporters

In an effort to augment the export of this fruit to the EU, APEDA is developing AnarNET on the lines of GrapeNet. Agri and processed food product exporters to US are advised to obtain complete information about standards relating to product, process, packaging, labelling, etc.

PRODUCTION OF FRUIT & VEGETABLES OVER TIME IN INDIA AND THE WORLD
(lakh mt)

Year	Fruit			Vegetables		
	India	World	%share	India	World	%share
1980-83	212.21	3,114.80	6.81	382.30	3482.50	10.98
2004-06	477.90	5,196.40	9.05	815.70	8,932.60	9.15

Compounded growth rate (%)

WORLD PRODUCTION OF FRUIT & VEGETABLES VIS-A-VIS INDIA (2006)

Fruit		Vegetables	
Production	%share	Production	%share
India 424	8.11	India 822	9.11
World production 5,241		world production 9,026	

Direction of trade for processed fruit & vegetables is presented in Table.

COMPOSITION & DIRECTION OF TRADE OF FRESH & PROCESSED FRUIT & VEGETABLES, INDIA

Item	Major importers from India
Fresh fruit & vegetables	
1. Fresh Onion	Bangladesh (26.90%), Malaysia (23.26%), UAE (18.02%), Sri Lanka (10.10%), Pakistan (8.05%)
2. Dry nuts (walnuts)	Spain (16.63%), France (12.93%), Egypt (11.76%), Germany (8.73%), UK (8.16%), Netherlands (5.47%), Denmark (5.39%)

3. Fresh Grapes	Netherlands (33.16%), UK (25.36%), UAE (12.15%), Bangladesh (10.29%), Belgium (5.14%), Germany (4.77%)
4. Fresh mango	UAE (46.36%), Bangladesh (28.14%), UK (8.04%), Nepal (4.98%), Saudi Arabia (2.98%), Kuwait (1.73%)
5. Other fresh fruit	Bangladesh (46.03%), UAE (24.44%), Saudi Arabia (8.60%), UK (8.22%), Netherlands (7.63%), Nepal (5.67%)
6. Other fresh vegetables	UAE (23.03%), UK (16.32%), Saudi Arabia (7.97%), Sri Lanka (6.76%), Pakistan (5.47%), Nepal (5.34%)

Processed fruit & vegetables

1. Dried & preserved vegetables	USA (18.72%), France (14.48%), Russia (8.31%), Spain (7.98%), Germany (7.94%), Belgium (6.23%)
2. Mango pulp	Saudi Arabia (26.72%), Netherlands (16.69%), Yemen Republic (8.54%), UAE (7.93%), Japan (5.17%), Kuwait (4.22%),
3. Pickles & chutneys	Russia (37.83%), USA (17.52%), Belgium (9.28%), Spain (5.68%), France (4.81%), Estonia (4.80%), Netherlands (3.62%)
4. Others	USA (29.39%), Netherlands (8.71%), Saudi Arabia (8.21%), UK (7.61%), UAE (5.40%), Indonesia (5.35%)

The potential competitors of India's export for fruit & vegetables are presented in Table.

INDIA'S POTENTIAL EXPORT COMPETITIVE COUNTRIES FOR FRUIT & VEGETABLES

Crops	Potential Competitors
Apple	China, South Africa
Lemon	South Africa, Jordan, Iran

Orange	Bhutan
Grapes	Australia, USA, S. Africa, Syria, Chile
Mango & Guava	Mexico, Brazil, Peru, Pakistan
Papaya	Malaysia
Pineapple	Thailand, S.Africa, Philippines, Malaysia, Kenya
Brinjal	Netherlands, Spain, France, Kenya
Cabbage	Spain, Netherlands
Cauliflower	Mexico, Australia, China, Singapore, UAE
Onion	Thailand, Netherlands, China, Singapore, UAE
Peas	Syria, Egypt, Greece, Kenya
Potato	Pakistan

COMPOSITION OF EXPORT OF FRESH & PROCESSED FRUIT & VEGETABLE AND PRODUCTS

Item	Quantity (000 mln tns)			Value (Rs. crore)		
	93-94	06-07	%change	93-94	06-07	%change
Fresh fruit & vegetables						
Fresh Onion	357.13 (75.13)	1,378.37 (69.48)	285.96	182.67 (47.40)	1163.31 (48.24)	536.84
Dried nuts (walnuts)	6.32 (1.33)	5.06 (0.26)	-20.06	67.17 (17.43)	118.03 (4.89)	75.72
Fresh mango	22.80 (4.80)	79.06 (3.99)	246.91	43.87 (11.38)	141.94 (5.89)	223.55
Fresh grapes	15.93 (3.35)	85.90 (4.33)	439.23	33.92 (8.80)	301.92 (12.52)	790.09
Other fresh vegetables	33.37 (7.02)	275.91 (13.91)	726.82	23.3 (6.04)	430.01 (17.83)	1745.54

Other fresh fruits	39.78 (8.37)	159.57 (8.04)	301.13	34.46 (8.94)	256.44 (10.63)	644.17
Total	475.33 (100.00)	1983.87 (100.00)	317.37	385.39 (100.00)	2411.65 (100.00)	525.77

Processed fruit & vegetables

Dried & pre-served veg.	53.31 (44.40)	366.32 (45.93)	584.55	107.08 (39.88)	1194.71 (47.74)	1015.72
Mango pulp	26.22 (21.76)	156.84 (19.67)	498.18	57.98 (21.59)	505.83 (20.21)	772.42
Pickles & chutney	13.11 (10.88)	145.21 (18.20)	1007.97	36.13 (13.46)	293.59 (11.73)	712.59
Other process- ed fruit & veg	27.66 (22.96)	129.11 (16.19)	366.37	67.31 (25.07)	508.14 (20.31)	654.92
Total	120.52 (100.00)	797.48 (100.00)	561.69	268.50 (100.00)	2502.27 (100.00)	831.94

Infrastructure Development Initiative

Ministry of Food Processing Industries, has taken the following initiatives:

- ◆ Packaging centre
- ◆ Integrated cold chain facilities
- ◆ Irradiation facility
- ◆ Modernised Abattoir

For details log on to www.mofpi.nic.in

PART III- CHAPTER 1

EXPORT STATISTICS FOR AGRI / HORTI PRODUCTS

All Agri Product

	2009-10	2010-11 (Apr-Feb)	2011-12
Product	Value	Value	Value
MARINE PRODUCTS	9,89,997.99	11,54,796.77	15,47,918.63
BASMATI-RICE	10,88,960.43	10,58,151.52	13,80,155.70
MEAT & PREPARATIONS	6,28,609.87	8,77,590.54	12,81,658.62
GUARGUM MEAL	1,13,330.58	2,80,574.58	12,60,822.81
SPICES	6,15,733.53	7,87,014.11	11,79,604.98
OIL MEALS	7,83,179.47	10,84,590.78	10,60,172.00
NON BASMATI	36,529.57	22,025.51	7,76,590.70
SUGAR	11,021.40	10,33,901.36	7,64,262.72
OTHER CEREALS	2,97,319.12	3,59,609.74	5,08,236.98
GROUNDNUT	1,42,593.29	2,09,976.63	4,55,473.60
CASTOR OIL	2,17,927.60	2,85,167.40	4,14,004.99
CASHEW	2,80,158.07	2,59,815.36	4,01,701.34
COFFEE	2,03,205.80	2,91,206.61	3,90,320.92
TEA	2,94,353.32	3,17,449.69	3,88,487.19
MISC PROCESSED ITEMS	2,09,528.99	2,56,982.80	3,40,914.20
FRESH VEGETABLE	2,94,172.78	2,53,082.21	2,74,726.01
TOBACCO UNMANUFACTURED	3,62,144.47	3,00,759.72	2,49,498.17
SESAME SEEDS	1,49,410.29	2,19,443.68	2,42,579.08
FRESH FRUITS	2,26,907.54	2,14,429.64	2,15,624.00
PROCESSED FRUITS & JUICES	1,15,931.98	1,00,640.91	1,48,563.86
SPIRIT & BEVERAGES	60,848.23	81,618.83	1,33,335.11
TOBACCO MANUFACTURED	72,296.02	79,106.80	1,00,946.29
PULSES	40,735.34	85,278.64	95,184.31
PROCESSED VEGETABLES	75,230.04	73,297.04	93,246.44
WHEAT	5.50	74.19	91,971.92
DAIRY PRODUCTS	54,937.21	78,032.71	51,290.55
POULTRY PRODUCTS	36,609.77	27,211.45	34,508.29
FLORICULTURE	29,446.38	28,652.36	32,860.10
FRUITS / VEGETABLE SEEDS	14,507.50	17,063.41	23,948.66
SHELLAC	7,130.15	11,295.15	23,466.73

MOLLASES	1,977.52	99,645.62	16,557.02
NIGER SEEDS	2,422.52	4,114.21	11,338.24
CASHEW NUT SHELL LIQUID	2,761.60	3,185.42	5,656.42
Total	74,59,923.87	99,55,785.39	1,39,95,626.58

India's exports

Exports to Pakistan - 982,116

Exports to Bangladesh- 670,130

Export of Vegetables

2010-11	802.89
2009-10	731.82
2008-09	680.18

Garlic Exports

Apr - Aug 10

Q (Ton)	Value (Rs.)
13250	498
(327% increase)	

Export of Processed meat

Year	Rs.lakhs
2010-11	2104.86
2009-10	958.52
2008-09	1014.42

Strawberries Export

	Rs. Cr
04 - 05	0.14
08 - 09	0.31
09 - 10	0.10

Oilmeals Exports

Sep 1- : 3.54 lakh tons (54% increase)

Soyameal exports

Oct 09 - Aug 10 :2.05 million tons

Export of sugar (in lakh tons)

2011-12	36.00 (proj.)
2010-11	31.00
2009-10	2.35
2008-09	1.65

Honey

US \$ 32.39 million

To US alone - US \$ 7.7 million.

APEDA's export earnings in FY09 were \$9.57 billion in dollar terms. This accounted for 63% of India's agriculture exports which were pegged at \$15 billion. Bananas which were not exported three years ago, have brought in Rs.100 crore of earnings in FY09. Indian ready-to-eat and conventional ethnic foods are a \$2 billion business.

Turmeric

Apr 08 - Jan 09 Q - 49000 tons

V - Rs.226.3 crore

Basmati Rice

India is the largest producer of basmati rice. Its exports in 2011-12 stood at around 2.5 million tons, a growth of about 15% over the previous year; 2,18 million tons.

Grapes

Number of container shipments in 09 season up to 31st December 09 is 2130 nos.

As on Apr 09, oilseeds are the highest export earner in agri basket (54.2 lakh tons, Rs.8341 crore). (Rs.7109 crore in 08).

World Sugar export in 09-10: 45 million tons (forecast by Australian Bureau of Agri Economics)

Garlic Exports

Apr - Aug10 Q - 13250 tons

V - Rs.498 (327% rise)

Coir and Products exports

09 - 10 Rs.804 crore

Apr - Jul 10 RS.265 crore

Export of veg oils

Q	V (Rs.)
07 - 08	123
08 - 09	181
09 - 10	196

Butter Exports

Yr	Rs. Cr
04 - 05	8.77
08 - 09	116.47
09 - 10	19.99

Strawberries Export

Yr	Rs. Cr
04 - 05	0.14
08 - 09	0.31
09 - 10	0.10

Oilmeal Exports

September 10 : 3.54 lakh tons (54% rise)

Soyameal Exports

Oct 09 - Aug 10 : 2.05 million tons.

Rice Exports

As on Aug 10, our annual exports of rice to EU, US and W. Asia are approximately 3 million tons.

Pineapple Exports

Yr	Rs. L
07 - 08	99
08 - 09	68
09 - 10	55

Export of poultry products (Rs.crores)

2010-11	301.33
2009-10	372/16
2008-09	422.07

Composition and direction of trade of fresh and processed fruit & vegetables, India

Item	Major importers from India
Fresh fruits & veg.	
1. Fresh onion	Bangladesh (26.90%), Malaysia (23.26%), UAE (18.02%), Sri Lanka (10.10%), Pakistan (8.05%)
2. Dry nuts (walnuts)	Spain (16.63%), France (12.93%), Egypt (11.76%), Germany (8.73%), UK (8.16%), Netherlands (5.47%), Denmark (5.39%)
3. Fresh grapes	Netherlands (33.16%), UK (25.36%), UAE (12.15%), Bangladesh (10.29%), Belgium (5.14%), Germany (4.77%)
4. Fresh mango	UAE (46.36%), Bangladesh (28.14%), UK (8.04%), Nepal (4.98%), Saudi Arabia (2.98%), Kuwait (1.73%)
5. Other fresh fruits	Bangladesh (46.03%), UAE (24.44%), Saudi Arabia (8.60%), UK (8.22%), Netherlands (7.63%), Nepal (5.67%)
6. Other fresh vegetables	UAE (23.03%), UK (16.32%), Saudi Arabia (7.97%), Sri Lanka (6.76%), Pakistan (5.47%), Nepal (5.34%)
Processed fruit & vegetables	
1. Dried & preserved veg.	USA (18.72%), France (14.48%), Russia (8.31%), Spain (7.98%), Germany (7.94%), Belgium (6.23%)
2. Mango pulp	Saudi Arabia (26.72%), Netherlands (16.69%)

Yemen Republic (8.54%), UAE (7.93%),
Japan (5.17%), Kuwait (4.22%).

3. Pickles & Chutneys Russia (37.83%), USA (17.52%), Belgium
(9.28%), Spain (5.68%), France (4.81%),
Estonia (4.80%), Netherlands (3.62%)

4. Others USA (29.39%), Netherlands (8.71%), Saudi
Arabia (8.21%), UK (7.61%), UAE (5.40%),
Indonesia (5.35%)

Note: figures in parentheses indicate per cent of total export of respective items to the country from India.

APEDA's export earnings in FY2009 was \$9.57 billion in dollar terms. APEDA's earnings accounted for 63% of India's agriculture exports which was pegged at \$15 billion.

Bananas, which were not exported in 07, have brought in Rs.100 crore of earnings in FY 09. India's ready-to-eat & conventional ethnic food are a \$2 billion business.

Rice Exports

07 - 08	11,755
08 - 09	11,764
09 - 10	11,254

As on Aug 10, our annual exports of Rice to EU, US and W. Asia are approximately 3 million tons.

Skimmed Milk Exports

Yr	Rs. Cr
07 - 08	451
08 - 09	377
09 - 10	137

Egg Yolk Exports

07 - 08	16.90
08 - 09	30.47

Export of Veg Oils

Yr	Rs. Cr
07 - 08	123
08 - 09	181
09 - 10	196

Export of Pulses

Year	Rs. Crore
2008-09	542.35
2009-10	408.28
2010-11	853.12

Butter Exports

Yr	Rs. Cr
04 - 05	8.77
08 - 09	116.47
09 - 10	19.99

Export of Beef

Year	(in tons)
2010	917
2011	1220
2012	1525

CHAPTER 2

FTP Policy 09 -14

FTP 09 - 14 has, like for other products, financial assistance to agri exporters. Some of the activities that are eligible for financial assistance are:

1. Strengthening of market intelligence and data base through studies and surveys
2. Quality upgradation
3. Development of infrastructural facilities
4. Research and Development
5. Development of packing quality
6. Human resource development
7. Upgradation of meat processing facilities

Referring to the WTO regime, the WTO agreement has opened new vistas of trade opportunities for developing countries like India. Removal of distortions in agri trade was likely to provide a level playing field for all the players alike and also provide access to the hitherto heavily protected markets.

Emphasising that achievement of the larger share of the world market would be possible through joint effort of government and trade, the government was committed to extending full support for creating the required infrastructural facilities and upgradation of quality for further boosting agro exports. Steps are initiated by APEDA to ensure quality improvement by developing pre and post-harvest protocols, and assisting exporters in implementing quality management system such as ISO 9000, etc. In future, competitive pricing and quality would determine the course of international trade. Hence, launching of the “Quality Produce of India” Logo is a move in the right direction. This should be extended to more and more products as it would establish India as a supplier of quality products.

MARKETING DEVELOPMENT ASSISTANCE

Export promotion continues to be a major thrust area for the Government.

To facilitate various measures being undertaken to stimulate and diversify the country's export trade; Marketing Development Assistance scheme with the following activities is under operation in the Department of Commerce:

- (a) Individual sales cum study tours abroad by exporters
- (b) Individual participation in trade fairs, exhibitions and buyer cum seller meets abroad by exporters
- (c) Export Promotion Council's sponsored trade delegations, study teams, fairs, exhibitions and buyer cum seller meets abroad.
- (d) Export publicity and advertisement abroad by EPCs and exporters
- (e) Development and promotional activities for export promotion efforts undertaken by the Export Promotion Councils and other Govt. Organizations.
- (f) Contesting Countervailing Duty and Antidumping Duty cases abroad
- (g) Any other development or promotional activity which is considered conducive to promote the export of Indian products and commodities.

The MDA Division of the Department of Commerce administers the utilization of assistance. Product specific Export Promotion Councils, Commodity Boards and other Govt. organization are eligible for MDA assistance for development and promotional activities to promote exports of Indian products. All exporters are eligible for Marketing Development Assistance in exploring markets and stimulating and diversifying exports of Indian products and commodities through activities like sales cum study teams, participation in fairs, exhibitions and buyer cum seller meets, advertisement in foreign media and bringing out publications, publicity material, product catalogues etc. for use abroad.

The various eligible export promotion activities and terms and conditions applicable for availing Marketing Development Assistance against them are as under:

Direct assistance to individual exporters for Export promotion-marketing activities abroad:

Exporters, who need trade enquiries, can log on to www.apeda.com

They have also brought out the publication, 'National Programme for Organic Production', priced at Rs. 300/-, encouraging cultivation and export of organic agri products.

APEDA has been encouraging exporters to set up infrastructure facilities like pre-cooling, cold storage, sorting and grading facilities, etc. Also APEDA is providing common infrastructure facilities to State Govts. and Airport Authority of India and other agencies under APEDA's scheme for Infrastructure Development. To complete the supply chain, APEDA has provided common infrastructure facilities at major airports. Under Agri Export Zones, State Govts. are providing infrastructure facilities.

APEDA has created storage, pack house and cold storage infrastructure in an important importing country, Rotterdam. As on Nov 07, it has plans to create such facilities in other two important importing countries, Dubai and Tokyo.

APEDA, in collaboration with the National Horticulture Mission, will take up the creation of storage, pack house and cold storage infrastructure in key banana cultivation clusters with export potential. Similar facilities will be created in important importing countries as well, as has been created by APEDA for flowers in Rotterdam.

Walk in Type Cold Rooms :

APEDA has provided walk in type cold rooms at Airports as an interim measure to maintain cold chain. The present status of walk in type cold room is given below:

1. Kolkatta - West Bengal - in operation
2. Agartala, Tripura - yet to start
3. Guwahati, Assam - not in operation
4. Lucknow - project is completed, Mandi Parishad has yet to start commercial operation
5. Coimbatore - in operation
6. Ahmedabad - in operation

To improve food safety and management system of the country, APEDA, in collaboration with Indira Gandhi National Open University (IGNOU)

launched in 08 a newly developed PG programme in food safety and quality management.

Vishesh Krishi and Gram Udyog Yojana (VKGUY)

Objective of VKGUY is to promote exports of:

- Agricultural produce and their value-added products
- Minor forest produce and their value-added variants; for exports w.e.f 1-4-2004;
- Gram Udyog Products, for exports w.e.f 1-4-2006;
- Forest based products, for exports w.e.f 1-4-2007
- Other products, as notified from time to time.

Such products shall be listed in Appendix 37A HBP V1.

Duty Credit scrip benefits are granted with an aim to compensate high transport costs. Exporters, of products notified in Appendix 37A of HBP v1, shall be entitled for duty credit scrip equivalent to 5% of FOB value of exports (realised in free foreign exchange).

However, there are other conditions stipulated. Please study them in the Handbook of Procedure Vol I, or contact APEDA.

APEDA SME members can avail of training programme regularly being conducted by IIFT in food processing sector.

The following are special focus initiatives offered by government for agriculture exports in the Policy 2009-2014:

1. Agriculture and village industry
2. Vishesh Krishi and Gram Udyog Yojana
3. Capital goods imported under EPCG will be permitted to be installed anywhere in AEZ.
4. Import of restricted items, such as panels, are allowed under various export export promotion schemes.
5. Import of inputs such as pesticides are permitted under Advance Authorisation for agro exports.
6. New towns of export excellence with a threshold limit of Rs.150 crore shall be notified.
7. Certain specified flowers, fruits and vegetables are entitled to a special duty credit scrip, in addition to the normal benefit under VKGUY.

e-Portal

Ministry of Food Processing Industries, has in Aug 10, brought in an e-portal, www.e-freshindia.com that aims to bring together farmers, suppliers and customers. It creates connectivity between the suppliers and buyers through a trading platform.

Transport Assistance (TA)

As per FT Policy 09-14, for promoting exports of select horticulture products, dairy, meat and poultry products and processed food items, transport assistance for export by air and sea is available. It will expire on 31st March 2012 unless extended.

All kinds of assistance are not available for export to all destinations. In some cases it is export to a specified country/s e.g. TA for banana is only for export to Middle East and for hatching eggs when exported to Middle East and Africa.

Export Credit to processors/ Exporters & Agri-Export Zone Units Packaging credit to AEZ units

Export Processing Units in AEZs (Agri Export Zones) may be provided finance for the purpose of procuring and supplying inputs to the farmers so that quality inputs are available to them which in turn will ensure that only good quality crops are raised. The exporters will be able to purchase/ import such inputs in bulk, which will have the advantages of economies of scale.

Lines of Credit (LOC) / Export Credit

Banks may sanction the lines of credit/ export credit to processors/ exporters to cover the cost of inputs required by farmers to cultivate crops to promote export of agri products. The processor units would be able to effect bulk purchases of the inputs and supply the same to the farmers as per a pre-determines arrangement.

Exports

Banks shall ensure that the final products are exported by the processors/ exporters as per the terms and conditions of the sanction in order to liquidate the pre-shipment credit.

Export Promotional Schemes in FT Policy of 2009-14 are:

Vishesh Krishi Gram Udyog Yojana (VKGUY)

Agri Export Zones

As on November 09, there are 60 approved Agri Export Zones in 20 states under various stages of implementation. The 60 AEZs envisage export of Rs.11821 crore.

Transport Assistance (TA) for (i) banana for export to Middle East (ii) for hatching eggs when exported to Middle East and Africa. This is available till 31st March 2012.

Agri Infrastructure Incentive Scrip (AIS) is introduced for import of specified agri equipment.

Privileges to Status Holders – Export Houses and Trading Houses.

Agri Infrastructure Incentive Scrip for Status Holders

For exports made during a particular year, all Status Holders (having status recognition for the current year) exporting products covered under ITC HS Chapters 1 to 24, shall be incentivised with duty credit scrip equal to 10% of FOB value of agricultural exports (including VKGUY benefits entitled under Policy) provided that the total benefits for all status holders put together does not exceed Rs.100 crore (i.e. Rs.50 crore for each half year) and the conditions specified in Para 3.7.2 of Handbook are satisfied.

Licensing Office

Zonal Office, CLA, New Delhi shall be the licensing office for grant of the benefit to all status holders.

Imports Permissible

The following capital goods/equipments shall be permitted for import:

1. Cold storage units (including Controlled Atmosphere (CA) and Modified Atmosphere (MA) stores); Precooling Units and Mother Storage Units for Onions, etc.

2. Pack Houses (including facilities for handling, grading, sorting and packaging etc)
3. Reefer Van/Containers
4. Other Capital goods/ Equipments as may be notified in Appendix 37F of the Handbook.

Permitted Usage

Imported capital goods/equipment shall be utilized for storage, packing etc and transportation of agricultural products (including agro-processed perishable products).

AU Condition

This additional benefits shall be subject to actual user condition and, hence, non-transferable.

Transferability

However, for import of cold chain equipment this Incentive Scrip shall be freely transferable amongst Status Holders.

Procedure to claim

Policy pertaining to the Agri Infrastructure Incentive Scrip under VKGUY is given in Para 3.13.4 of Chapter 3 of FTP. All Status Holders may apply for grant of Duty Credit scrip for export made during current year to RA, CLA, New Delhi in 'ANF 3D-ANF for Policy Para 3.13.4' along with documents prescribed therein.

Applicants may file one application before the last date prescribed for each half year period (Apr-Sep / Oct-Mar). Applications for exports during Apr-Sept period shall be filed from 15th January till 15th February of current year and for exports during Oct-Mar period, applications shall be filed from 1st May till 31st May of the next licensing year.

Applications received after the last date shall be summarily rejected, as Para 9.3 and Para 9.4 shall not be applicable.

Proportionate Benefit

The allocation of duty credit scrips by RA, CLA, New Delhi, under Para 3.13.4 of FTP, shall be done proportionate to the eligible claims of individual

applications, vis-à-vis the total eligible claims of all the status holders put together, received for each half year (Apr-Sep / Oct-Mar) periods, in such a way that the total benefits granted for all status holders put together do not exceed the limit prescribed for each half year in Para 3.13.4 of FTP. Accordingly, if the total eligible claim of all the status holders put together is, say, Rs.200 crore, each applicant status holder would be granted one-fourth of the claim an applicant is eligible for.

Vishesh Krishi and Gram Udyog Yojana (VKGUY)

For details of following features:-

Objectives

The VKGUY is to promote exports of:-

- (i) Agricultural produce and their value added products
- (ii) Minor forest produce and their value added variants
- (iii) Forest based products
- (iv) Other products as notified from time to time

Products Eligible

The products which are included in the VKGUY are listed at Appendix 37 A of Handbook, shall be entitled for Duty Credit scrip equivalent to 5% of FOB value of exports (realized in free foreign exchange) for exports from 27/8/2009 as in the current 2009-14 policy.

Duty Credit Scrip @ 5%

Exporters of products notified in Appendix 37 A of Handbook, shall be entitled for Duty Credit Scrip equivalent to 5% of FOB value of exports (realized in free foreign exchange) for exports from 27/8/2009 as in the current 2009-14 Policy.

Reduced Rate of scrip @ 3%

Duty Credit Scrip benefits shall be granted only at a reduced rate of 3% of FOB value of exports (realized in free foreign exchange) in such cases where exporter has availed benefits of:

- (i) Drawback rates higher than 1% and or
- (ii) Specific DEPB rate (i.e. other than Miscellaneous Category – Sr. Nos. 22C & 22D of Product Group 90); and or Advance Authorisation or duty free import authorisation import of inputs (other than catalysts, consumables and

- (i) packing materials) for the exported product for which Duty Credit Scrip under VKGUY is being claimed.

Additional Rate of Scrip @ additional 2%

For exports made w.e.f. 27/8/2009, some flowers, fruits and vegetables and other products, as listed in Table 2 of Appendix 37A of the Handbook shall be entitled to an additional duty credit scrip equivalent to 2% of FOB value of exports over and above the 5% or 3% VKGUY reduced rate entitlement available.

Procedure for claiming duty credit scrip by exporters (other than Status Holders)

Application for grant of Duty Credit Scrip under VKGUY for export made from 27/8/2009 onwards shall be made to RA concerned in ANF 3C along with documents prescribed therein.

Listed products shall be eligible for Duty Credit Scrip upon exports on or after the date of export indicated in the relevant Appendix of the Handbook.

Electronic Filing

Filing of application under e-commerce facility is also available.

An application filed through e-com by the last date of application shall be considered as an application on time. However, the applicant is required to submit application in physical form along with relevant documents after filing of application in e-com within 7 working days to the concerned Regional Authority.

Applications received by RA under any of the Export Promotion Schemes, including VKGUY, after last date but within 6 months from the last date of application, shall be processed by imposing 10% late cut in entitlement in tune with para 9.3 of the Handbook of Procedures.

1. Financial Assistance Scheme for Agricultural and meat exports
2. Transport Assistance for Horticulture and Processed foods exports by Air and Sea.

Please contact APEDA for further details.

CHAPTER 3
APEDA
ORGANIZATIONAL DETAILS OF APEDA

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DELHI

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GUJARAT

Gujarat Agro Corporation Ltd.,
Ahmedabad - 380 709

ORISSA

E-mail : apicol@dte.vsnl.net.in

NAGALAND

Tel : +91-370-221311
Fax : +91-370-221311

JAMMU & KASHMIR

Tel : +91-194-2434402
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TAMIL NADU

E-mail :
agrimarkbusiness@rediffmail.com

PUNJAB

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BIHAR

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UTTAR PRADESH

E-mail : apedaup@lw1.vsnl.net.in

MANIPUR

Em : Foodjoyapeda@yahoo.com.in

MADHYA PRADESH

Email: mpsaidc@sancharnet.in

CHATTISGARH

Chattisgarh State Udyog Vikas Nigam Ltd.,
Email:csidc@nic.in

NAGALAND

Telefax : 370 - 2221311

Ministry of Food Processing Industries, New Delhi

website: www.mofpi.nic.in

Apeda's website gives :

- Registration procedures
- Schemes
- Assistance schemes.

APEDA stands for the Agricultural and Processed Food Products Export Development Authority. APEDA is an autonomous organization attached to the Ministry of Commerce of the Government of India. The main function of APEDA is to build links between Indian producers and the global markets. APEDA undertakes the briefing of potential sources on government policy and producers; along with providing referred services and suggesting suitable partners for joint ventures, besides arranging buyer-seller meets.

SPECIAL TECHNOLOGY OF APEDA

Refrigeration Technology

The refrigeration technology has already been developed for some of the products like Grapes, Kinnow and Pomogranates, Potatoes etc. and these products are being exported by refrigerated containers in bulk from the country is also being exported by sea transportation under refrigerated conditions. In 06-07, Litchi has been transported by reefer container to Europe and the result of 1998 consignment was successful and the Litchis reached in good condition after forty days of transit period. The trial shipment of litchies is being undertaken this year also for improving and fine tuning the protocols for sea transportation of litchi.

Controlled Atmosphere & Modified Atmosphere Technology

Some of the perishable products like mango, bananas, apples, papaya, vegetables, etc. require not only controlled temperature and humidity conditions, but also maintenance of appropriate conditions of gases like Nitrogen, Oxygen, Carbon dioxide etc. The percentage of concentration depends upon the respiratory rates of the produce, Ministry of Commerce, through APEDA is indulging in an experiment for the development of protocols for export of mango through CA container by sea. The Ministry has also initiated steps for installing a CA Container in AERIE complex, Pusa, New Delhi for developing a protocols for various fruits and vegetables. However, considering the fact that India is a large country with varying adverse climatic conditions, and growing various horticultural products spread throughout the country, it is necessary to install such CA containers in various Research Institution and develop protocols for various horticultural produce so that the technology for CA storage is

developed in the country and disseminated to the interested parties. Considering the huge demand for horticultural products within the country, development of such technology would also result in increasing the shelf life of products traded within the country and in the process, market and price abnormalities created because of glut in production or scarcity in production could be effectively addressed to. It would be necessary to evolve inter-modal transportation system, with complementing roles between road transport and railways. It is necessary to note, at this juncture, that shelflife would considerably bring down the wastage of horticultural products, which is estimated to be 30-40%.

Modified Atmosphere Technology is a recent development for increasing shelf life of horticultural produce. In this technology, the gas concentration of various gases surrounding the horticulture produce is maintained at appropriate levels, by wrapping the produce in plastic film made by binding different layers of polymers, having very defined chemical composition. The chemical compositions of the plastic film, is product specific and is determined on the basis of the respiratory rate of the horticultural product. By developing plastic films for various products, the horticulture products can be wrapped around with such films and transported through ordinary refrigerated containers by maintaining controlled temperature and humidity conditions. The advantage in this technology is that the impact of any damaged produce is confined only to the products wrapped along with such damaged produce ; the other products contained in the same refrigerated container are not affected. The development of the protocol for various horticultural produce and adoption of this technology on commercial stage is not clearly known. Research Institutions like CFTRI and ICAR should be able to throw light on this.

The development of Modified Atmosphere Technology is ideally suited for the Indian conditions and here again inter-modal transportation by complementing roles of surface Transport and Rail Transport is possible. Since in this technology, only refrigerated containers are used, there is no need for setting up separate CA conditions which are very costly.

At present many of the horticultural produces are being transported by air for want of development of protocols for increasing the shelflife of these products and transportation of these products by sea. India's contribution

in the over all world trade of horticultural produce is of miniscule proportions. Development of the technologies mentioned above, are necessary requisities to ensure sustained growth in export of horticultural produce and increasing its share in the over all trade to appreciable levels.

Controlled Atmosphere & Modified Atmosphere Technology has been recognized as one of the latest technologies for enhancing shelf life and maintaining the quality of tropical fruits by maintaining temperature, relative humidity and the combination of a gases. CA/MA technology is most appropriate as it reduces respirator rate, ethylene production and action, compositional changes, associated with ripening and incidence physiological disorders.

APEDA, keeping in view the latest technology innovation in the field of storage of tropical fruits for a longer period, initiated an important exercise under its R&D efforts, where Research Institutions like Central Food Technological Research Insititute, Mysore, Natural Resource Institute, London and State Government Agencies, State Research Institute have also been involved. APEDA launched this trial experinment with the products like mango, which is one of he major fruits exported from the country and identified the major commercial varieties like Alphanso, Banganpalli, Kesar, Totapuri, Suvarnarekha and Chausa for initial trials for preparing an appropriate protocol for transportation of these varities of mangoes by sea. During the year 997, first CA container of Benganpalli mangoes, under the CA condition was dispatched fromVijayawada to U.K. The container reached UK after 35 days of havesting. The result was encouraging and it was found CA Technology can be developed as an alternative technology where shelf life and quality of mangoes can be maintained for more than 30 days. Keeping the probability of success in preparing an appropriate protocol for sea transportation of mangoes to distant market, APEDA further improved in the per-harvest and post-harvest management of mangoes where it has adopted an integrated approach for production of quality mangoes, with the variety and region wise identification. With the improvements in pre-harvest and post harvest practices and setting up the packhouse having the basic infrastructure at the production. APEDA had continued the CA experiment.

During the year 1998, two CA containers of Kesar mangoes, one from Gurjarat and another from Maharashtra were sent to Europe and there was improvement in the results. APEDA, further analyzed the observation made by Natural Resource Insititute, London and Central Food Technological Research Institute, Mysore and suggosition provided by them for pre-and post-harvest management were duly incorporated in the protocol and the amended protocol was followed for shipment of CA container of mangoes during the year 1999. Four CA containers were sent to UK and Hong Kong in 1999. The initial indications of these containors as shown that Banganpalli Mangoes can definitely be transported by sea under CA conditions. The protocol developed so far by and large units the transportation of Banganpallu mangoes and Shelf life and quality can be maintained upto 30 -40 days.

The proposed exercise is required to be continued for another one or two years till an most appropriate protocol is developed. The improvement in the protocol can be further amended in the field of pre-harvest, post-harvest and packaging, palletisation, etc. for making most appropriate protocol for variety and region specific for transportation of tropical fruits and vegetables by sea.

QUALITY MANAGEMENT CENTRE

Improvement of Quality of Raw Agricultural Produce

- | Pre harvest manual covering good agricultural practices to be followed by farmers to ensure the production of produce of desired quality, are available for sale for following horticultural produce :
 - | Grapes
 - | Kinnows
 - | Nagpur Mandrin
- | Post harvest manure covering, ideal practices of harvesting and procuring of the produce right from the stage of procurement of raw materials till it reaches the final customers are available for sale for the following horticultural produce :
 - | Grapes

- | Kinnows
- | Litchis
- | Kinnows
- | Nagpur Mandrin

1. Guidelines for exporters for procuring and packing

- | Do's and Dont's for exporters to immediately understand and follow guidelines to ensure quality of fresh horticulture produce have been developed for the following products :
 - | Grapes
 - | Mangoes
 - | Litchis
 - | Apples

These guidelines can be procured from APEDA office.

2. Pesticide Residue Test Module

Pesticides are found to be present in residual quantities in food and agricultural products as well as their presence in the environment. The Agreement on Sanitary and Phyto-sanitary Measures gives each country the freedom to control products in usage for excessive levels of pesticide residues. To ensure that the product does not get rejected after it reaches the importing country, the exporter needs to have his product analyzed for pesticides and supply only such products which meet the importing countries' requirement.

To assist exporters as well as laboratories to carry out pesticide residue analysis, tests modules have been compiled by APEDA under following two parts :

Part -A General Requirements covering laboratory layout/design, environmental conditions, infrastructural support, test and auxiliary equipment, standard reference materials, documentation and reporting of test results, list of suppliers of equipment and a list of pesticides categorized under various groups.

Part B - Specific Requirements covering pesticide residue analysis of different food products including fresh and processed fruits and vegetables, foodgrains and cereal products, milk and milk products nuts and oil seeds, live stock (frozen and processed), egg and egg products butter and ghee. For each group three essential processers are covered namely extraction, clean up and determination.

These guidelines can be procured from APEDA's office.

CHAPTER 4

ORGANIC FOOD PRODUCTS

Organic Foods

Every year, millions of tonnes of fertilisers are dumped into the biosphere, polluting natural resources and endangering consumers with residual chemicals. For India organic farming seems to be a very elegant solution for solving two problems : preserving the regenerative capacity of the earth, and gaining access to international markets for exports of organic products.

Organic agriculture is now practiced in approximately 110 countries. As on Jun 06, retail organic food sales are worth US\$ 31 billion.

The key characteristic of organic farming is the use of organic materials in the place of synthetic inputs including fertilisers and agro chemicals. While the international market for organic produce is accounting for one percent of world's conventional agri production the quantum of Indian exports is hardly Rs. 46 crore.

Standards for organic products

'Organic' is a claim to the production process, rather than the product itself. It, for instance, the product is free from pesticide residues, this in itself is no proof that the product has been produced organically.

Food products can be divided into three segments:

- a) for industrial use (for Food Processing Industry)
- b) for direct consumption (retail market)
- c) for catering and institutional sector

The first segment is most important for exporters in developing countries. The significance of the food industry as an end use of organic raw material is growing fast as there is demand for convenience foods and ready meals.

The EU market is the largest single market after the US, while Germany remained the leader in EU.

Since Feb 09, Centre for Perishable Cargo (CPC), promoted by APEDA, is functioning with 25000 MT storage capacity in Kochi Airport. The centre will improve quality of perishable products being exported like fruits, vegetables, flowers, fisheries and poultry products to the Middle East as well as Europe and the US. The CPC at Cochin is a much needed facility for an airport like Cochin, which is becoming a future cargo hub and attracting global players and direct international cargo flights.

Among the recommendations put forward by Exim Bank include - focussing on niche varieties to maximise organic premiums at farm level, processing at source and tying up directly with buyers.

Internationally, the concept has worked by creating a chain starting from the farmers to the retailer who agrees to sell organic products. It is the quality which increases returns to the farmer. At the latest count, the western market for organic products is set to grow rapidly as dietary consciousness increases. The Exim Bank has quoted that the world organic market is estimated at \$26 bln, on an area of 20 mln ha.

Organic farming is being encouraged in our States to convert wastelands into organic farms to produce soyabean, mangoes and oilseeds.

As on Jan 06, the worldwide organic food market is about \$40 bln, and is growing at the rate of \$13 bln / year.

Organic pineapples

A company in Kerala, is having a pilot project to persuade producers for shipping organic pineapples by sea, thereby making possible bulk exports.

Perhaps for the first time in the country, large-scale organic pineapple farming will take place in Kerala. Farmers, are being offered a subsidy of Rs. 25,000 a hectare.

Organic Pineapple will be priced at least 30 percent more than normal fruits. It is also expected to brighten the prospects for fresh pineapple exports from India.

APEDA has developed a protocol to promote the exports.

For further details, please contact APEDA.

The demand for organic produce has increased with the growing awareness in consumers and supportive policy in major countries (USA, EU and Japan).

Organic Products exports to EU / Germany

The increase of organic food imports of Germany includes: Coffee, Tea and Cocoa Grains, Pulses and Seed, Vegetable Oils and Fab Edible nuts Spices and Herbs, Dried fruits, Fruit juices and concentrates, Sugar, Honey.

HS Code	Description
0901	Coffee
0902	Tea
1801	Cocoa
	<u>Grains</u>
1006	Rice
0713 to 0713 90	Pulses
1206	Oil seeds
1207 4090	
1507 to 1511	Veg Oils
0804 1000 to 0813 40 / 7095	Dried Fruits
2009 11 to 2009 90	Fruit Juices
1202	Edible oils
2008	
080 1 to 0813 50 31	
0904 11	Spices and herbs

0910 99

1701 11

Sugars

1703 10

0409 00 00

Honey

Other competing exporters to EU of organic foods are Argentina, Mexico, China, Sri Lanka and Turkey.

India can develop much more higher SPS norms than EU by encouraging organic farming. India exports organic products in basmati rice, sesame seeds, cashew nuts and wall nuts, pineapple juice. Organic tea has no demand in India.

The best way for Indian exporters to market organic products to EU is indirect. The most important distribution channel is importers in developed countries specialised in organic products. Specialised importers are located in Rotterdam, the port of distribution in Netherlands to the European hinterland. Also Hamburg, Germany, is an important entry point.

The following websites can be very helpful in finding a business partner
www.organicts.com/

www.biofach.de,

www.linksorganic.com -- Importers of organic products

The second segment has a fast growing item, baby food. Higher educated consumers are triggered by safe and healthy food products for their children.

In some EU developed countries, organic menu, organic tea and coffee are served in public schools, institutions, schools, hospitals, etc. Some airline companies, e.g., Lufthansa and Swissair offer organic-on-flight meals.

An example of an Internet site on which buyers and sellers of organic products can meet online is

www.organics.com
or
www.greentrade.net

The price difference between conventional and organic products has decreased during the recent years, allowing increase in competition in organic sector.

Standards for organic products

“Organic’ is a claim to the production process, rather than the product itself. It, for instance, the product is free from pesticide residues, this in itself is no proof that the product has been produced organically.

EU Customers Regulation

Each consignment should have a ‘Certificate of inspection’ by the exporters certifying organisation, stipulating exact quantities of each separate product of the consignment. This control certificate should be included in the original shipping documents needed by EU Customs. If the importer has no import permit or a control certificate is missing, the consignment cannot be cleared through EU Customs.

The price premium is one of the main barriers to buy organic products. The premium is varying between 18 - 142 percent, even though the average premium in Germany is above European average. The average German buyer of an organic product is between 35 and 40 years, though affluent better-educated professionals in 24 - 35 group prefer organic products for their safety. Environmental reasons for youngsters are less important.

The trade sector was worried about lack of common organic seal in Germany, but from Sep 01, Germany has developed 100 different organic labels. (Biosiegel)

For market reports about the organic market in Germany, please refer to

* The country report on Germany at

www.organiceurope.net

- * Germany Organic Agriculture at www.fas.usda.gov/
- * ganifiles (1999 12) 2554 6541 pdf and German Organic Market Support at www.fas.usda.gov/ganifiles/200203/135683621.pdf

Organic food certification

National programme for organic production has certified Indocert, Kochi, to issue certificates for GLOBALCAP certification of Indian fruits and vegetables.

For any clarification for sourcing/export of organic products, please log on to Apeda's website.

The Hyderabad-based, Deccan Development Society (DSS), has received the first formal permission from the PGS Organic Council of India to use the organic produce emblem on the produce they market.

The PGS Organic Council of India, in collaboration with the International Forum for Organic Agriculture Movement (IFOAM), and the Food and Agriculture Organisation have started the certification system that is totally controlled and monitored by farmers themselves.

Traceability Initiatives - Organic Food Sector

After the success of 'GrapeNet' (traceability system of grapes), APEDA has devised the traceability software working in coordination with Certification Bodies. This is expected to enhance the credibility of India's certification procedures and organic products around the world. The new 'Trace Net' software details can be obtained from APEDA.

An email may be sent to tracenet@apeda.com.

APEDA has, in May 10, implemented Tracenet, a first of its kind traceability software for organic food.

For successful implementation and better understanding of 'Tracenet', APEDA besides preparing a user's manual is organising around 30 training programmes across the country.

Organic farming certification course

Ministry of Commerce, in collaboration with IGNOU, Ministry of Agriculture, state governments, Apeda, Spices Board, has started a certificate course in organic farming, to meet the needs of trained personnel in India. Also, government is contemplating to increase the number of organic farming certifying agencies.

For joining the course, students are requested to keep browsing the above organisation's website.

International competence centre for Organic Agriculture (www.iccoa.org) gives world news on organic farming.

Food processing entrepreneurs, rice millers, packed food manufacturing industries, can take advantage of Food and Organic Sample Analysis Institute for analysis and reports on raw and processed foods and organic samples.

Certification Agencies for Organic Products approved by APEDA

IMO Control Pvt. Ltd., Bangalore

Em : imoind@imocontrol.net

Nuturland - Association for Organic Culture, Germany

Indian Branch Office

Dr. Prabha Mahale (GP), Gurgaon

Em : india@naturland.de

Assn. for Promotion of Organic Farming, Bangalore

Em : humint@blr.vsnl.net.in

Indian Organic Certification Agency (INDOCERT), Kochi
Em : info@indocent.org

Prof. Dr. K.K. Krishnamurthy, Coimbatore
Em : profdrkk@yahoo.com

Mr. Arun Raste, Mumbai
Em : arun@irft.org

The Indian Institute of Crop Processing Tech (IICPT)
www.pprc.gov.in

APEDA RECOGNIZED LABORATORIES FOR EXPORT TEST

JAMMU & KASHMIR

Regional Research Laboratory

Council of Scientific & Industrial Research

E-mail : rrlj@ndc.vsnl.net.in

DELHI / NEW DELHI

Shriram Institute for Industrial Research

E-mail : sridlhi@vsnl.com

Food Research and Analysis Centre

E-mail : frac@del3.vsnl.net.in

GUJARAT

SGS India Limited

Tel : 02836-21857

Fax : 02836-32883

Jai Research Foundation

E-mail : jrf@vapi.lwbbs.net

MAHARASHTRA

M/s. Reliable Analytical Laboratories

E-mail : geochemmid@mantraonline.com

SGS India Limited

Tel : 022-2025253

Fax : 022-2854857

National Horticulture R&D Foundation

E-mail : nhrd@bom6.vsnl.net.in

Indecticide & Residue Testing Laboratory

E-mail : drabhay@satyam.net.in

Mahatma Phule Krishi Vidyapeeth

Tel : 02426-34240

Poultry Diagnostic Research Centre

E-mail : pdrpune@pn3.vsnl.net.in

KARNATAKA

Shriram Institute for Industrial Research

E-mail : sribglr@bgl.vsnl.net.in/

srisrb@vsnl.net.in

Bangalore Test House

E-mail : testhouse@satyam.net.in

TAMIL NADU

SGS India Limited

Tel : 044-4335552/4338157/4338158

Fax : 040-4347502

ANDHRA PRADESH

M/s. Vimta Labs Ltd.

E-mail : vimtalab@hdl.vsnl.net.in

WEST BENGAL

SGS India Ltd.

Tel : 033-4463275, 4470267

Fax : 033-4470267

CHAPTER 5

QUALITY

EU is the biggest importer of food stuff in the world and the largest market for exports from developing countries in agro food stuffs 62 % of imports in agriculture stuff comes from developing countries. For technical assistance to developing countries, for instance, to comply with our phyto sanitary and veterinary issues we have different budget lines for that and we have also created a help desk website which in fact is very well utilized. Since we created, we received on an average 1400 requests per day and it seems 700 comes from India so it means there is increase in exports, the interest in the EU in that this kind of tourism can help in fact again wipe in the benefit in which trade liberalization can bring in.

"The rapid alert system for food and feed (RASFF) is primarily a tool for exchange of information between competent authorities in cases where a risk to human health arising from a food or feed has been identified and measures have been taken, such as withholding, recalling, seizure or rejection of the products concerned. This quick exchange of information allows all Member States to verify immediately whether they are also affected by the problem. Whenever the product is already on the market and should not be consumed, the Member States authorities are then in a position to take all urgent measures, including direct information to the public if necessary."

"The system involves a network consisting of the Member States, the European Food Safety Authority and the Commission, which is responsible for the management of the system."

Source: <http://fao.org/docrep/meeting/008/ae141e.htm>

EU is insisting on EUREP GAP certification to ensure veracity, transparency and harmonisation of global agricultural standards. As on 04, grapes from India are already certified under this while the process for mango, pomegranate, banana and pineapple is under way.

Stringent norms imposed especially by EU countries have prompted us to seek various quality systems.

Quality aspects

The EU has very strict quality legislation on imported food products including animal feeds specially pertaining to permissible levels of aflatoxin, hexane and pesticide residues and other harmful foreign material. These enter agricultural produce during post – harvest handling and processing which is expected to affect India's exports, particularly groundnut, cashewnuts, walnuts, pepper, chillies, oil cakes and marine products.

Aflatoxins are very serious problem for many agricultural commodities including maize, chillies, sesame and groundnut. They are potent carcinogenic, immuno-suppressive bio-chemicals produced when the aspergillus fungus invades certain agricultural commodities.

FoodCert, the Netherlands based certifying company, provides certification for HACCP for food processing industries, ISO 9001 and ISO 14001.

Apart from SGS India (P) Ltd., Skal and Euro Cert are other active certifying agencies.

The Indian farmer is unaware of the quality, of the EU market, export procedures and sale terms of his produce. AEZs have been asked to fill this gap to achieve world quality standards and growth in exports.

Exporters are requested to be in constant contact with their nearest offices of APEDA, EXIM BANK and NABARD, who have partnered to promote best quality agri exports.

SPS Standards

Indian farmer exporters are experiencing difficulties in fulfilling the SPS (sanitary and phytosanitary measures) of the developed nations importers. This SPS agreement is put in a CD ROM by WB government (department of food processing and horticulture).

Market Access Requirement

Exporters wishing to penetrate the European market should be aware of the many requirements of their trading partners and EU governments. Standards that are being developed through legislations, Codes, marketing, labels and certificates with respect to environment, safety, health, labour conditions and business ethics are gaining importance. Exporters must have to know EU legislations and market requirements.

For all quality requirement of EU countries, please get latest guidance from:- EU-India TIDP, 19, Pragati Maidan, New Delhi
www.eu-india.com

Lab Equipment

EU-India Trade Investment Development Programme (TIDP) is an EU organisation in New Delhi to promote trade and investment between EU and India.

One of the promotional measures is to strengthen EIA (Export Inspection Agency) labs in India in selected locations.

Lab Equipment for EIAs

Imported laboratory equipment, under the EU India TDP has been installed in the EIAs at Chennai, Kolkata, Mumbai, Porbander and Bhubaneswar; this is to conduct all required chemical tests. Equipment suppliers are Agrotec SPA, Rome, Italy, Admin Italy, Shanghai Rep Office, Shanghai, China and Elsamex International Madrid, Spain.

In accordance with the terms of the financing agreement between the Government of India and the European Union, all such equipment has been exempted from the payment of customs duty.

The suppliers of equipment are Agrotec SPA, Rome, Italy, Agmin Italy, Shanghai Rep office, Shanghai, China and Elsamex International, Madrid, Spain.

The equipment will be delivered to the EIAs at Chennai, Kolkata, Mumbai, and Kochi and their sub offices at Thoppunpadi, Kollam, Veraval, Porbander and Bhubaneswar.

The equipment under supply is for conduct of all required chemical tests. In so far as the microbiological tests are concerned, the EIC already has some equipment and more will be added with its own resources according to requirement.

All concerned EIA laboratories will be in full readiness to receive and install the equipment as soon as these arrive in India. The commissioning of the equipment will follow immediately. Local staff will be trained on operation of the equipment. Selected laboratory technicians will be sent abroad for a detailed training in this regard sometime later this year.

Quality and grading standards

There is now a EU - wide explicit regulation, which has made the industry to pay attention to chain management and labeling systems, through which products can be traced to their producers. EC has now taken legal measures to deal with the issue of food safety. There are regulations concerning packaging and labeling, product composition, additives, contaminants, environment and for a member of product groups, regulations concern the product itself.

UK legislation on food labelling

In end 04, UK has brought in new legislation in the UK market for food labelling.

With effect from 25 Nov 04, consumers should be much better informed

about food ingredients, as the UK implements an important amendment to the food labelling Directive (2000/13).

The amending legislation (Directive 2003/89) lists certain ingredients liable to cause allergies or intolerance and insists that Member States must ensure consumers are able to identify any of these ingredients that may be present in food.

In addition, some labelling exceptions will no longer be accepted for allergens. Previously it was possible to declare ingredients only as a category (such as “vegetable oil”), whereas the new rules will require the source to be indicated for all allergenic ingredients so that, for example, “peanut oil” must be specified. Similarly, the source of natural flavour such as a nut will have to be indicated, while it is currently labelled only as “natural flavour”.

Compound ingredients consisting of mixtures of herbs and spices that make up less than 2 percent of the finished product do not have to list their ingredients, and ingredients making up less than 2 percent of the finished product need not be listed in weight order in the ingredients list. Companies will have a transitional period of one year to allow them to bring product labelling into line with the new rules.

Exporters are requested to check with APEDA, High Commission for UK in New Delhi, internationally accredited inspection and certifying agencies, etc., for proper guidance - all thro' website.

Standard Body for Supply Chain Management

GS1 India is the Indian affiliate of GS1 and has been set up by the Ministry of Commerce, Government of India along with APEDA and Apex Chambers of commerce and Industry.

GS1 is the standards body set up by the industry to facilitate development of global standards used in the Supply Chain Management across Industry sectors and product categories.

In 06, APEDA has developed a software which can trace back to the origin of the produce in the reverse order from shelf to farm.

This traceability has helped grape farmers to bank together and apply uniform farming practices. Because of this, farmers have earned 40% extra value for export. This has enabled access to supermarkets in EU.

Organic Statutory certification norms comprise EEC Regulation No.2092/91 in EU member states, USDA standards in USA and Japanese agricultural standards (JAS) for organic products in Japan.

In similar lines, National Standards of Organic Production (NSOP) has been set up by National Steering Committee for Organic Agriculture under the ministry of commerce, GOI.

US FDA

FDA registration is required for all companies that manufacture, process, pack or store food or beverages that may be consumed in the US.

Companies located outside the US need to designate a US agent for FDA communications.

RECOGNISED TEST FACILITIES

The Following Laboratories have been recognized by APEDA for test facilities for export:

Hyderabad

Vinta Labs Ltd

142, Cheralapally Hyderabad - 500 051.

Tel.: 040-7124141 Fax : 040-7123657

Bangalore

Shriram Institute for Industrial Research

Plot No 14 and 15, Sadamangla Industrial Area

Whitefield, Bangalore - 560 048.

Tel : 080-8410165 / 8410172

Fax : 080-8410189

APEDA is trying to secure market access for bovine meat and poultry markets in US and Thailand. This is sequel to our ability to meet stringent quality (phytosanitary) standards of these nations.

Also in respect of mangoes, Apeda is involved in market access to Australia, Japan and US, by meeting phytosanitary and other international strict standards.

Exporters are requested to contact nearest Apeda for details and assistance.

Also refer to Quality Management Centre of APEDA in chapter 2, Part II.

APEDA has launched in August 09 Pack House Recognition Scheme on quality packaging of food products. Details can be had from them.

FOOD SAFETY STANDARDS

BRIEF DESCRIPTION OF MAJOR FOOD STANDARDS

BRC Global Standard - Food	British Retail consortium is the leading trade association for UK retailing and it set up food standard in 1998 in response to the industry needs. BRC Global Standard-Food is a food safety and quality management protocol based on HACCP and designed for manufacturers of all types of food products.
International Food Standards (IFS)	IFS was set up in 2002 by HDE (Hauptverband des Deutschen Einzelhandels), the German Retail Association. In 2003, French retailers from FCD joined the IFS working group and contributed to the development of the current version. IFS is a food safety and quality management protocol based on HACCP that is designed for producers of all types of food products.
SQF Codes	Safe Quality Food (SQF) standards were originally established by the Western Australian Department of Agriculture in 1996, in response to the demands of the farming and small food manufacturing sectors for a quality assurance system.
Dutch HACCP Code	The Dutch National Board of Experts - HACCP set up Dutch HACCP code, also called CCvD-HACCP code, in 1996. The standard focuses on all operators along the food chain.
GLOBALGAP	GLOBALGAP came into being in Sept 2007 by change from its earlier name EUREPGAP. Euro-Retailer Produce Association was joined by large fresh produce suppliers and producers. GLOBALGAP has developed different certification programmes named Global Good Agriculture Practices.

ISO 22000	Released on 30th Aug 2005, objectives of ISO 22000 is to establish a single internationally recognised standard for food safety management systems. ISO 22000 has been set up by international Organisation for Standardisation (ISO). ISO 22000 applies to all food operators.
Global Food Safety Initiative (GFSI)	GFSI is a food retail initiative created in May 2000 by the Global Food Business Forum (CIES), a network of 175 retailers and 175 suppliers in over 150 countries, representing 65% of global food retail revenue. The GFSI Guidance Document establishes a benchmark model to serve as an 'equivalency framework'.

Accreditation of New Certification Bodies Under NPOP

With the approval of the National Accreditation Body (NAB), APEDA has accredited four new certification bodies under NPOP in september 2008. Amongst the four, three are domestic agencies namely ISCOP (Indian Society for Certification of Organic Products), Coimbatore; Vedic Organic Certification Agency VOCA, Hyderabad; Aditi Organic Certifications Pvt Ltd, Bangalore. Food Cert India Pvt Ltd, is an international certification body, located in Hyderabad.

AGRI EXPORT ZONE

Agri export zone is a new concept being adopted by the country to capture the Asian, EU and other markets with our agri/horti products meeting international standards.

Central government in conjunction with state governments have promoted and are promoting, on a regular basis, AEZs, by creating the infrastructure.

As on Jul 06, 60 AEZs are operational.
AEZ actual exports (05-06) was Rs.5110 Cr.

The Export Inspection Council (EIC) and the Export Inspection Agencies (EIA) working under it are well established inspection organs of the government of India, rendering support to the export trade for long. Though the government had dispensed with compulsory inspection by the EIAs for majority of export products, even now, many food products are subject to compulsory inspection. TIDP has supported the EIAs upgrading their laboratory's staff with knowledge about the latest EU requirements.

Also, EIC's schemes of recognition of inspection bodies as also of inspection of private food processing industries, have been vetted by EU experts and comments offered to make these fall in line with the EU requirements. Director EIC is confident of not only making full use of the equipment delivered but also ensure that these are properly maintained. The new equipment will help the EIAs to undertake some additional tests, earlier farmed out.

Bureau of Indian Standards (BIS) has been assisted in strengthening the WTO-TBT enquiry point and in propagating CE marking. Both these activities have been now taken up as regular activities of the BIS.

The Upgradation of EIA's laboratories and training its personal form an important part of the SPS TBT component. It was reported that all the lab equipment ordered have reached the EIA laboratories at Chennai, Kochi, Kollam, Bhubaneswar, Porbandar and Veraval.

With changes in life styles in Urban India, both men and women generally employed, the demand for, including ready-to-eat food stuffs, has increased. However, the growth of this sector has not kept pace with the increasing demand.

TRADE FAIRS

Trade Fairs for the Food and Beverage Trade

Grüne Woche / International Green Week

Berlin, Germany.

January (Every year)

Organiser : Messe Berlin GmbH

Messedamm 22, D-14 055 Berlin

Em : igw@messe-berlin.de

www.messe-berlin.de

www.gruenewoche.de

Interfood with Scandinavian Fast Food Wine and Spirits Expo

Goteborg, Sweden

Every 3rd year

Organiser : Swedish Exhibition Centre

Em : info@swefair.se

www.swefair.se

TEMS - International Food Fair of Scandinavia Hotel, Restaurant & Catering

Trade Fair Copenhagen Wine & Spirits Show

Copenhagen, Denmark

Every 2nd Year

Organiser : Messecenter Herning,

Vardev 1, DK-7400 Herning

Em : mch@messecenter.dk

www.messecenter.dk

Gastro Nord & Vinordic

Stockholm, Sweden

(Every 3rd year)

Organiser : Stockholm International Fairs

S-125 80 Stockholm

Em : staff@stofair.se

www.stockholm/massan.se

Convenience Store/Fast Food and Petrol Station Trade Fair

Stockholm, Sweden

2006 (Every 3rd year)

Interfood with Scandinavian Fast Food Wine and Spirits Expo
Goteborg, Sweden
(Every 3rd year)
Organiser : Swedish Exhibition Centre
S-412 94 Goteborg
Em : info@swefair.se
www.swefair.se

TEMA-International Food Fair of Scandinavia Hotel, Restaurant & Catering
Trade Fair Copenhagen Wine & Spirits Show
Copenhagen, Denmark
(Every 2nd year)
Organiser : Messecenter Herning,
Em : mch@messecenter.dk
www.messecenter.dk

Nordbag
Herning, Denmark
06 (Not yet decided) (Every 3rd year)
Organiser : Messecenter Herning

Agri Products
Food Forum India
Mar 4-5, 2010
Mumbai

www.foodforumindia.com

APEDA's website gives details of Trade Fairs in India and abroad; additionally, many Event Management Organisations, including ITPO, give details of Trade Fairs.

ANNEXURES

Product Codes

10063002	Basmati Rice
10061000	Rice in Husk
10062000	Husked (Bracin Rice)
10063001	Rice para boiled
10063009	Rice except para boiled
10064000	Broken Rice
10011000	Driem Wheat
10019001	Wheat Seed
10019002	Wheat terhilman
10019003	Murlin Consumption
1701	Sugar

Fruits and Vegetables

i. Fresh Onions

<u>Product Code</u>	<u>Description</u>
07031001	Onion

Other Fresh Vegetables

07011000	Potato Seeds
07019000	Potatoes Fresh
07020000	Tomatoes
07041000	Cauli Flowers
07069001	Radishes
07069002	Salad Beet Root Fresh
07069009	Cucumbers
07142000	Sweet Potatoes
07109000	Mixed Vegetable Frozen
07070000	Peas
07081000	Beans
08045002	Mangoes
08061000	Grapes Fresh
08062001	Raisins
08062009	Sultanas and other
08129002	Dried Grapes

08030000	Banaras
08041001	Fresh date
08043000	Pine Apple
08045001	Fresh Avava
08045003	Sliced Mangoes
08052000	Lemon
08053000	Grape fruit fresh
08054000	Other citrus fruits
08059000	Water Melon
08071100	Papaya
08071900	Apples
08072000	Pear & Quince
08081000	Apricots
08082000	Peaches
08091000	Plum
08092000	Pomegranates
08109007	Straw Berries
08109009	Rasp Berries

KEY STATISTICS

INDIA

Land area (million hectares)

Total	297.4
Cropped	185.5
Irrigated	66.14

Principal commodities (million tons)

Total grains	202.5
Rice	84.7
Wheat	71.0
Coarse grains	31.0
Total oilseeds	26.5
Groundnut	7.5
Soybean	6.0
Rapeseed	5.8
Total oils	5.6

Groundnut oil	1.7
Soybean oil	0.98
Rapeseed oil	1.6
Total oilseed meals	13.0
Sugar	15.0
Cotton	2.8
Tea	0.81

Livestock products (million tons)

Milk	74.5
Eggs (billions)	33.1
Poultry	0.67
Lamb and mutton	0.91

Livestock (million head)

Cattle	209
Buffalo	94
Goat	123
Sheep	55

Exports (million US\$)

Total exports	38,106
Agricultural exports	6,769
Agricultural share	17.8%
Imports (million US\$)	7,190
Total imports	41,435
Agricultural imports	3,251
Agricultural share	78%

Source: FAS/USDA: Agricultural attache reports;
USDA: PS&D database.

LIST OF CONSULTATION AGENCIES

Consultation Agencies for Implementation of HACCP

Food Safety Solutions Intl., Kochi

Fax : 0484 - 2541352

Paradigm Services (P) Ltd., Pune

Em : paragigms@vsnl.com

Quality Management Services, Delhi

Em : qg@bul.net.in

The Quality Catalyst, Delhi

Em : raoappaji@hotmail.com

Quality Care Services, New Delhi

Em : quality@delhi1.mtnl.net.in

Certification Agencies, Em : mscd@bis.org.in

Food Test India Pvt. Ltd., Hyderabad

Em : srihari@hd2.dot.net.in

List of accredited Agencies for Organic Products

Ecocert International (Germany), Aurangabad

Ph : 0240-2376336

Skal International (Netherlands), Bangalore

Em : naraupa@blr.vsnl.net.in

SGS India (P) Ltd., Gurgaon

Em : john_bryden@sgs.com

Lacon Gmbh (Germany), Germany

Em : lacon@lacon_institute.com

Branch Office - India

Renewable Energy, Alwaye, Kerala

Em : MITHRAM-1@satyam.net.in

ANNEXURE

Items permitted for Import / Domestic procurement by EOU / SEZ units engaged in Agriculture / Horticulture without payment of duty for supply to contract farmers in the DTA.

INPUTS :

1. Seeds
2. Fertilizers and chemicals for pre and post harvest treatment such as micro nutrients, plant and growth regulators and other organic and inorganic substances used for plant nutrition, insecticides, fungicides, weedicides, herbicides and the like.

EQUIPMENTS :

1. Filters
2. Driplines, Driplines and Drip-fittings
3. Micro sprinklers and misters
4. Agriculture sprinklers
5. Fertilizer Tanks
6. Valves
7. Fertilizer pumps and chemical injections
8. Crates, drums and preservation media (Such as acetic acid and vinegar)
9. Grading Tables
10. Green House equipment, accessories, heated rooting tables, propagation trays, seeding machines.
11. Plants or parts thereof, seeds, saplings, tubers, bulbs, Rhizomes, root cuttings, all types of grafts, tissue culture material and other vegetatively propagated material utilized for sowing or planting.
12. Growing media such as Peat Moss (including peat litres) whether or not agglomerated), Perlite/Vermiculite, Rockwool, Coca peat, Hydrocorn, Foam based medium and other cultivation medium.

Some useful websites

Product – specific information	Internet site
ABECITRUS The Brazilian Association of Citrus exporters	http: //www.abecitrus.com.br
AIJN: Association of the Industry of Juices and Nectars from Fruit and Vegetables of the European Union	http://www.aijn.org
CIIAA: Confederation of the FOOD and Drink Industries of the EU	http://www.ciaa.be
Food & Drink Federation	http://www.fdf.org.uk
OEITEFL: European Association of Fruit and Vegetable Processing Industry	http://www.oeitfl.org
Processed Apple	http://www.appleproducts.org
SFG Schutzgemeinschaft der Fruchtsaft Industrie e.V	http://www.sgf.org
Ultimate Citrus	http://www.ultimatecitrus.com
UNESDA Confederation of the Food and Drink Industry of the EU	http://www.unsesda-cisda.org
VdF: German Fruit Juice Industry Association	http://www.fruchtsaft.net
VIGEF: Netherlands Association of Fruit and Vegetables Processing Industry	http://www.vigef.nl

Organisation related to the food sector in general	Internet Site
IFU International Federation of Fruit Juice Producers	http://www.ifu-fruitjice.com
Research and Information Centre on Food ingredients and the food ingredients industry	http://www.foodnavigator.com
EUFICE European Food Information Council	http://www.eufic.org
Food Info Net	http://www.foodinfonet.com
Foreign Agricultural Service US Mission to the European Union	http://www.usev.be/agri/Fruit-Veg.html

Other Organisation	Internet site
Codex Alimentarius	http://www.codexalimentarius.net
International Chamber of Commerce	http://www.iccwbo.org
European Normalisation Committee	http://www.cenorm.be
European Union On-line	http://www.europa.eu.int
Eurostat Statistics Database	http://www.europa.eu.int/comm/eurostat
International Trade Organisation	http://www.intracen.org http://www.p-maps.org
ISO	http://www.iso.org
Market Access data base of the EU	http://www.mkacddb.eu.int
WHO World Health Organization	http://www.who.org
WTO, technical barriers to trade	http://www.wto.org/english/tratop_e/tpt_E/tbt_e.htm

Tit Bit

Infomedia 18 Ltd.

Email: spedit@infomedia18.in) publishes a monthly magazine, Modern Food Processing in association with RINGIER.

It has information on latest technologies, equipment, innovations, Technology offered/Technology requested parties etc.

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Part III and IV are common for both Agri and Horti products

Students and Exporters must please note that they should check with the authorities regarding the functioning of any of the various schemes enumerated in the following chapters. This is because additions, deletions and amendments to such promotional schemes are quite common. The general procedure for exports which are common for all export categories such as documentation, marketing, finance, etc have not been covered here, as they are given in greater detail in the main course materials.